

**MEPS HC-060:  
2001 Full Year  
Consolidated Data File**

**April 2004**

**Center for Financing, Access and Cost Trends  
Agency for Healthcare Research and Quality  
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## **A. Data Use Agreement**

Individual identifiers have been removed from the micro-data contained in these files. Nevertheless, under sections 308 (d) and 903 (c) of the Public Health Service Act (42 U.S.C. 242m and 42 U.S.C. 299 a-1), data collected by the Agency for Healthcare Research and Quality (AHRQ) and/or the National Center for Health Statistics (NCHS) may not be used for any purpose other than for the purpose for which they were supplied; any effort to determine the identity of any reported cases is prohibited by law.

Therefore in accordance with the above referenced Federal Statute, it is understood that:

1. No one is to use the data in this data set in any way except for statistical reporting and analysis; and
2. If the identity of any person or establishment should be discovered inadvertently, then (a) no use will be made of this knowledge, (b) the Director Office of Management AHRQ will be advised of this incident, (c) the information that would identify any individual or establishment will be safeguarded or destroyed, as requested by AHRQ, and (d) no one else will be informed of the discovered identity; and
3. No one will attempt to link this data set with individually identifiable records from any data sets other than the Medical Expenditure Panel Survey or the National Health Interview Survey.

By using these data you signify your agreement to comply with the above stated statutorily based requirements with the knowledge that deliberately making a false statement in any matter within the jurisdiction of any department or agency of the Federal Government violates Title 18 part 1 Chapter 47 Section 1001 and is punishable by a fine of up to \$10,000 or up to 5 years in prison.

The Agency for Healthcare Research and Quality requests that users cite AHRQ and the Medical Expenditure Panel Survey as the data source in any publications or research based upon these data.

## **B. Background**

The Medical Expenditure Panel Survey (MEPS) provides nationally representative estimates of health care use, expenditures, sources of payment, and insurance coverage for the U.S. civilian noninstitutionalized population. MEPS is cosponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS).

MEPS is a family of three surveys. The Household Component (HC) is the core survey and forms the basis for the Medical Provider Component (MPC) and part of the Insurance Component (IC). Together these surveys yield comprehensive data that provide national estimates of the level and distribution of health care use and expenditures, support health services research, and can be used to assess health care policy implications.

MEPS is the third in a series of national probability surveys conducted by AHRQ on the financing and use of medical care in the United States. The National Medical Care Expenditure Survey (NMCES, also known as NMES-1) was conducted in 1977 and the National Medical Expenditure Survey (NMES-2) in 1987. Since 1996, MEPS continues this series with design enhancements and efficiencies that provide a more current data resource to capture the changing dynamics of the health care delivery and insurance system.

The design efficiencies incorporated into MEPS are in accordance with the Department of Health and Human Services (DHHS) Survey Integration Plan of June 1995, which focused on consolidating DHHS surveys, achieving cost efficiencies, reducing respondent burden, and enhancing analytical capacities. To advance these goals, MEPS includes linkage with the National Health Interview Survey (NHIS) - a survey conducted by NCHS from which the sample for the MEPS HC is drawn - and enhanced longitudinal data collection for core survey components. The MEPS HC augments NHIS by selecting a sample of NHIS respondents, collecting additional data on their health care expenditures, and linking these data with additional information collected from the respondents' medical providers, employers, and insurance providers.

### **1.0 Household Component**

The MEPS HC, a nationally representative survey of the U.S. civilian noninstitutionalized population, collects medical expenditure data at both the person and household levels. The HC collects detailed data on demographic characteristics, health conditions, health status, use of medical care services, charges and payments, access to care, satisfaction with care, health insurance coverage, income, and employment.

The HC uses an overlapping panel design in which data are collected through a preliminary contact followed by a series of five rounds of interviews over a 2 ½-year period. Using computer-assisted personal interviewing (CAPI) technology, data on medical expenditures and use for two calendar years are collected from each household. This series of data collection rounds is launched each subsequent year on a new sample of households to provide overlapping panels of survey data and, when combined with other ongoing panels, will provide continuous and current estimates of health care expenditures.

The sampling frame for the MEPS HC is drawn from respondents to NHIS. NHIS provides a nationally representative sample of the U.S. civilian noninstitutionalized population, with oversampling of Hispanics and blacks.

## **2.0 Medical Provider Component**

The MEPS MPC supplements and/or replaces information on medical care events reported in the MEPS HC by contacting medical providers and pharmacies identified by household respondents. The MPC sample includes all home health agencies and pharmacies reported by HC respondents. Office-based physicians, hospitals, and hospital physicians are also included in the MPC but may be subsampled at various rates, depending on burden and resources, in certain years.

Data are collected on medical and financial characteristics of medical and pharmacy events reported by HC respondents. The MPC is conducted through telephone interviews and record abstraction.

## **3.0 Insurance Component**

The MEPS IC collects data on health insurance plans obtained through private and public-sector employers. Data obtained in the IC include the number and types of private insurance plans offered, benefits associated with these plans, premiums, contributions by employers and employees, eligibility requirements, and employer characteristics.

Establishments participating in the MEPS IC are selected through three sampling frames:

- A list of employers or other insurance providers identified by MEPS HC respondents who report having private health insurance at the Round 1 interview.
- A Bureau of the Census list frame of private sector business establishments.

- The Census of Governments from the Bureau of the Census.

To provide an integrated picture of health insurance, data collected from the first sampling frame (employers and insurance providers identified by MEPS HC respondents) are linked back to data provided by those respondents. Data from the two Census Bureau sampling frames are used to produce annual national and state estimates of the supply and cost of private health insurance available to American workers and to evaluate policy issues pertaining to health insurance. National estimates of employer contributions to group insurance from the MEPS IC are used in the computation of Gross Domestic Product (GDP) by the Bureau of Economic Analysis.

The MEPS IC is an annual survey. Data are collected from the selected organizations through a prescreening telephone interview, a mailed questionnaire, and a telephone follow-up for nonrespondents.

#### **4.0 Survey Management**

MEPS data are collected under the authority of the Public Health Service Act. They are edited and published in accordance with the confidentiality provisions of this act and the Privacy Act. NCHS provides consultation and technical assistance.

As soon as data collection and editing are completed, the MEPS survey data are released to the public in staged releases of summary reports, microdata files and compendiums of tables. Data are released through MEPSnet, an online interactive tool developed to give users the ability to statistically analyze MEPS data in real time. Summary reports and compendiums of tables are released as printed documents and electronic files. Microdata files are released on electronic files.

Selected printed documents are available through the AHRQ Publications Clearinghouse. Write or call:

AHRQ Publications Clearinghouse  
Attn: (publication number)  
P.O. Box 8547  
Silver Spring, MD 20907  
800-358-9295  
410-381-3150 (callers outside the United States only)  
888-586-6340 (toll-free TDD service; hearing impaired only)

Be sure to specify the AHRQ number of the document you are requesting.

Additional information on MEPS is available from the MEPS project manager or the

MEPS public use data manager at the Center for Financing, Access and Cost Trends, Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, MD 20850 (301/427-1406).



## **C. Technical and Programming Information**

### **1.0 General Information**

This documentation describes the 2001 full-year consolidated data file from the Medical Expenditure Panel Survey Household Component (MEPS HC). Released as an ASCII file (with related SAS and SPSS programming statements) and a SAS transport dataset, this public use file provides information collected on a nationally representative sample of the civilian noninstitutionalized population of the United States for calendar year 2001. This file consists of MEPS survey data obtained in Rounds 3, 4, and 5 of Panel 5 and Rounds 1, 2, and 3 of Panel 6, the rounds for the MEPS panels covering calendar year 2001, and contains variables pertaining to survey administration, demographics, employment, health status, quality of care, patient satisfaction, health insurance, and person-level medical care use and expenditures.

The following documentation offers a brief overview of the types and levels of data provided, the content and structure of the files, and programming information. It contains the following sections:

- Data File Information
- Survey Sample Information
- Variable-Source Crosswalk (Section D)

A codebook of all the variables included in the 2001 full-year population characteristics data file is provided in a separate file (H60CB.PDF).

A database of all MEPS products released to date and a variable locator indicating the major MEPS data items on public use files that have been released to date can be found at the following link on the MEPS web site:  
[www.meps.ahrq.gov/Data\\_Public.htm](http://www.meps.ahrq.gov/Data_Public.htm).

### **2.0 Data File Information**

This public use dataset contains variables and frequency distributions associated with 33,556 persons who participated in the MEPS Household Component of the Medical Expenditure Panel Survey in 2001. These persons received a person-level weight, a family-level weight, or both (some participating persons belonged to families characterized as family-level nonrespondents while some members of participating families were not eligible for a person-level weight). These persons were part of one of the two MEPS panels for whom data were collected in 2001: Rounds 3, 4, and 5 of Panel 5 or Rounds 1, 2, and 3 of Panel 6. Of these persons, 32,122 were assigned a positive person-level weight. There were 12,852 families

receiving a positive family-level weight. The codebook provides both weighted and unweighted frequencies for each variable on the dataset. In conjunction with the person-level weight variable (PERWT01F) provided on this file, data for persons with a positive person-level weight can be used to make estimates for the civilian noninstitutionalized U. S. population for 2001.

The records on this file can be linked to all other 2001 MEPS-HC public use data sets by the sample person identifier (DUPERSID). Panel 5 cases (PANEL01=5) can be linked back to the 2000 MEPS-HC public use data files. However, the user should be aware that, at this time, no weight is provided to facilitate two-year analysis of Panel 5 data.

## 2.1 Codebook Structure

The codebook and data file sequence lists variables in the following order:

- Unique person identifiers and survey administration variables
- Geographic variables
- Demographic variables
- Income and tax filing variables
- Employment variables
- Health insurance variables
- Disability days indicators
- Access to care variables
- Health status variables
- Utilization, expenditure and source of payment variables
- Weight and variance estimation variables

## 2.2 Reserved Codes

The following reserved code values are used:

VALUE		DEFINITION
-1	INAPPLICABLE	Question was not asked due to skip pattern
-2	DETERMINED IN PREVIOUS ROUND	Question was not asked in round because there was no change in current main job since previous round
-7	REFUSED	Question was asked and respondent

		refused to answer question
-8	DK	Question was asked and respondent did 120 not know answer
-9	NOT ASCERTAINED	Interviewer did not record the data
-10	HOURLY WAGE >= \$62.50	Hourly wage was top-coded at \$62.50 for confidentiality

## 2.3 Codebook Format

This codebook describes an ASCII data set and provides the following programming identifiers for each variable:

IDENTIFIER	DESCRIPTION
Name	Variable name (maximum of 8 characters)
Description	Variable descriptor (maximum 40 characters)
Format	Number of bytes
Type	Type of data: numeric (indicated by NUM) or character (indicated by CHAR)
Start	Beginning column position of variable in record
End	Ending column position of variable in record

## 2.4 Variable Naming

In general, variable names reflect the content of the variable, with an eight-character limitation. Edited variables end in an X and are so noted in the variable label. The last two characters in round-specific variables denote the rounds of data collection, Round 3, 4, or 5 of Panel 5 and Round 1, 2, or 3 of Panel 6. 110 Unless otherwise noted, variables that end in "01" represent status as of December 31, 2001.

Variables contained in this delivery were derived either from the questionnaire itself or from the CAPI. The source of each variable is identified in the section of the documentation entitled "Section D. Variable-Source Crosswalk". Sources for each variable are indicated in one of four ways: (1) variables derived from CAPI or assigned in sampling are so indicated; (2) variables derived from complex algorithms associated with re-enumeration are labeled "RE Section"; (3) variables

that are collected by one or more specific questions in the instrument have those question numbers listed in the Source column; (4) variables constructed from multiple questions using complex algorithms are labeled “Constructed.”

## **2.5 File Contents**

### **2.5.1 Survey Administration Variables (DUID – RURSLT53)**

The survey administration variables contain information related to conducting the interview, household and family composition, and person-level and RU-level status codes. Data for the survey administration variables were derived from the sampling process, the CAPI programs, or were computed based on information provided by the respondent in the re-enumeration section of the questionnaire. Most survey administration variables on this file are asked during every round of the MEPS interview. They describe data for Rounds 3/1, 4/2, 5/3 status and status as of December 31, 2001. Variable names ending in “xy” represent variables relevant to Round “x” of Panel 5 or Round “y” of Panel 6. For example, RULETR53 is a variable relevant to Round 5 of Panel 5 or Round 3 of Panel 6, depending on the panel in which the person was included. The variable PANEL01 indicates the panel in which the person participated.

The December 31, 2001 variables were developed in two ways. Those used in the construction of eligibility, inscope, and the end reference date were based on an exact date. The remaining variables were constructed using data from specific rounds, if available. If data were missing from the target round but were available in another round, data from that other round were used in the variable construction. If no valid data were available during any round of data collection, an appropriate reserved code was assigned.

### **Dwelling Units, Reporting Units, and Families**

The definitions of Dwelling Units (DUs) in the MEPS Household Survey are generally consistent with the definitions employed for the National Health Interview Survey. The Dwelling Unit ID (DUID) is a five-digit random ID number assigned after the case was sampled for MEPS. A person number (PID) uniquely identifies each person within the DU. The variable DUPERSID is the combination of the variables DUID and PID.

PANEL01 is a constructed variable used to specify the panel number for the person. PANEL01 will indicate either Panel 5 or Panel 6 for each person on the file. Panel 5 is the panel that started in 2000, and Panel 6 is the panel that started in 2001.

A Reporting Unit (RU) is a person or group of persons in the sampled DU who are related by blood, marriage, adoption, foster care, or other family association. Each RU was interviewed as a single entity for MEPS. Thus, the RU serves chiefly as a family-based “survey” operations unit rather than an analytic unit. Members of each RU within the DU are identified in the pertinent three rounds by the round-specific variables RULETR31, RULETR42, and RULETR53. End-of-year status (as of December 31, 2001 or the last round they were in the survey) is indicated by the RULETR01 variable. Regardless of the legal status of their association, two persons living together as a “family” unit were treated as a single RU if they chose to be so identified. Examples of different types of RUs are:

1. A married daughter and her husband living with her parents in the same DU constitute a single RU
2. A husband and wife and their unmarried daughter, age 18, who is living away from home while at college constitute two RUs
3. Three unrelated persons living in the same DU would each constitute a distinct RU (a total of three RUs)

Unmarried college students (less than 24 years of age) who usually live in the sampled household but were living away from home and going to school at the time of the Round 3/1 MEPS interview were treated as a RU separate from that of their parents for the purpose of data collection.

The round-specific variables RUSIZE31, RUSIZE42, RUSIZE53, and the end-of-year status variable RUSIZE01 indicate the number of persons in each RU, treating students as single RUs separate from their parents. Thus, students are not included in the RUSIZE count of their parents’ RU. However, for many analytic objectives, the student RUs would be combined with their parents’ RU, treating the combined entity as a single family. Family identifier and size variables are described below and include students with their parents’ RU.

The round-specific variables FAMID31, FAMID42, FAMID53, and the end-of-year status variable FAMID01 identify a family (i.e., persons related to one another by blood, marriage, adoption, foster care, or self-identified as a single unit) for each round and as of December 31, 2001. The FAMID variables differ from the RULETR variables only in that student RUs are combined with their parents’ RU.

Two other family identifiers, FAMIDYR and CPSFAMID, are provided on this file. The annualized family ID letter, FAMIDYR, identifies eligible members of the eligible annualized families within a DU. The CPSFAMID represents a redefinition of MEPS families into families defined by the Current Population Survey (CPS). Some of the

distinctions between CPS and MEPS defined families are that MEPS families include and CPS families do not include: non-married partners, foster children, and in-laws. These persons are considered as members of separate families for CPS-like families. The reason CPS-like families are defined is so that a poverty status classification variable consistent with established definitions of poverty can be assigned to the CPS-like families and used for weight poststratification purposes. In order to identify a person's family affiliation, users must create a unique set of FAMID variables by concatenating the DU identifier and the FAMID variable.

Instructions for creating family estimates are described in section 3.3.

Health Insurance Eligibility Units (HIEUs) are sub-family relationship units constructed to include adults plus those family members who would typically be eligible for coverage under the adults' private health insurance family plans. To construct the HIEUIDX variable, which links persons into a common HIEU, we begin with the family identification variable CPSFAMID. Working with this family ID, we define HIEUIDX using family relationships as of the end of 2001. Persons missing end of year relationship information are assigned to an HIEUIDX using relationship information from the last round in which they provided such information. HIEUs comprise adults, their spouses, and their unmarried natural/adoptive children age 18 and under. We also include children under age 24 who are full-time students (living at home or away from home). Other children who do not live with their natural/adoptive adult parents are placed in an HIEUIDX as follows:

- Foster children always comprise a separate HIEUIDX.
- Other unmarried children are placed in stepparent HIEUIDX, grandparent HIEUIDX, great-grandparent HIEUIDX, or aunt/uncle HIEUIDX.
- Children of unmarried minors are placed (along with their minor parents) in the HIEUIDX of their adult grandparents (if possible). Married minors are placed into separate HIEUs along with any spouses and children they might have.
- Some HIEUs are headed by unmarried minors, when there is no adult family member present in the CPSFAMID.

HIEUs do not, in general, comprise adult (nonmarital) partnerships, because unmarried adult partners are rarely eligible for dependent coverage under each other's insurance. The exception to this rule is that we include adult partners in the same HIEU if there is at least one (out-of-wedlock) child in the family that links to both adult partners. In cases of missing or contradictory relationship codes, HIEUs are edited by hand, with the presumption being that the adults and children form a nuclear family.

The round-specific variables FAMSZE31, FAMSZE42, FAMSZE53, and the end-of-year status variable FAMSZE01 indicate the number of persons associated with a single family unit after students are linked to their associated parent RUs for analytical purposes. Family-level analyses should use the FAMSZE variables.

Note that the variables RUSIZE31, RUSIZE42, RUSIZE53, RUSIZE01, FAMSZE31, FAMSZE42, FAMSZE53, and FAMSZE01 exclude persons who are ineligible for data collection (i.e., those where ELGRND31 NE 1, ELGRND42 NE 1, ELGRND53 NE 1 or ELGRND01 NE 1); analysts should exclude ineligible persons in a given round from all family-level analyses for that round.

The round-specific variables RURSLT31, RURSLT42, and RURSLT53 indicate the RU response status for each round. Users should note that the values for RURSLT31 differ from those for RURSLT42 and RURSLT53. The values for RURSLT31 include the following:

Value	Definition
-1	Inapplicable
60	Complete with RU member
61	Complete with proxy--all RU members deceased
62	Complete with proxy--all RU members institutionalized or deceased
63	Complete with proxy, other
80	Entire RU merged with other RU
81	Entire RU deceased before 1/1/01
82	Entire RU is in military before 1/1/01
83	RU institutionalized before 1/1/01
84	Entire RU left U.S. before 1/1/01
85	RU ineligible before 1/1/01, multi-reason
86	RU ineligible, Non-Key NHIS study
87	Re-enumeration complete, no eligible RU member, Ineligible RU
88	Unavailable during field period
89	Too ill, No proxy
90	Physical/Mental incompetent, No proxy
91	Final Refusal

Value	Definition
92	Final Breakoff
93	Unable to locate
94	Entire RU is military or left U.S. after 1/1/01
95	RU member institutionalized after 1/1/01, No proxy
96	RU member deceased after 1/1/01, No proxy
97	Re-enumeration complete, no RU member, Non-Response
98	RU moved too far away to interview
99	Final other Non-Response

The values for RURSLT42 and RURSLT53 include the following:

Value	Definition
-1	Inapplicable
60	Complete with RU member
61	Complete with proxy--all RU members deceased
62	Complete with proxy--all RU members institutionalized or deceased
63	Complete with proxy, other
70	Entire RU merged with other RU
71	Re-enumeration complete, no eligible RU member, Ineligible RU
72	RU institutionalized in prior round; still institutionalized
81	Entire RU deceased before 1/1/01
82	Entire RU is in military before 1/1/01
83	RU institutionalized before 1/1/01
84	Entire RU left U.S. before 1/1/01
85	RU ineligible before 1/1/01, multi-reason
86	RU ineligible, Non-Key NHIS study
87	Language Barrier
88	Unavailable during field period
89	Too ill, No proxy



Value	Definition
90	Physical/Mental incompetent, No proxy
91	Final Refusal
92	Final Breakoff
93	Unable to locate
94	Entire RU is military or left U.S. after 1/1/01
95	RU member institutionalized after 1/1/01, No proxy
96	RU member deceased after 1/1/01, No proxy
97	Re-enumeration complete, no RU member, Non-Response
98	RU moved too far away to interview
99	Final other Non-Response

Standard or primary RUs are the original RUs from NHIS. A new RU is one created when members of the household leave the primary RU and are followed according to the rules of the survey. A student RU is an unmarried college student (under 24 years of age) who is considered a usual member of the household, but was living away from home while going to school, and was treated as a Reporting Unit (RU) separate from his or her parents' RU for the purpose of data collection. RUCLAS01 was set based on the RUCLASS values from Rounds 3/1, 4/2, and 5/3. If the person was present in the responding RU in Round 5/3, then RUCLAS01 was set to RUCLAS53. If the person was not present in a responding RU in Round 5/3 but was present in Round 4/2, then RUCLAS01 was set to RUCLAS42. If the person was not present in either Rounds 4/2 or 5/3 but was present in Round 3/1, then RUCLAS01 was set to RUCLAS31. If the person was not linked to a responding RU during any round, then RUCLAS01 was set to -9.

### Reference Period Dates

The reference period is the period of time for which data were collected in each round for each person. The reference period dates were determined during the interview for each person by the CAPI program. The round-specific beginning reference period dates are included for each person. These variables include BEGRFM31, BEGRFD31, BEGRFY31, BEGRFM42, BEGRFD42, BEGRFY42, BEGRFM53, BEGRFD53, and BEGRFY53. The reference period for Round 1 for most persons began on January 1, 2001 and ended on the date of the Round 1 interview. For RU members who joined later in Round 1, the beginning Round 1 reference date was the date the person entered the RU. For all subsequent rounds, the reference period for most persons began on the date of the previous round's

interview and ended on the date of the current round's interview. Persons who joined after the previous round's interview had their beginning reference date for the round set to the day they joined the RU.

The round-specific ending reference period dates for Rounds 3/1, 4/2, and 5/3 as well as the end-of-year reference period end date variables are also included for each person. These variables include ENDRFM31, ENDRFD31, ENDRFY31, ENDRFM42, ENDRFD42, ENDRFY42, ENDRFM53, ENDRFD53, ENDRFY53, ENDRFM01, ENDRFD01, and ENDRFY01. For most persons in the sample, the date of the round's interview is the reference period end date. Note that the end date of the reference period for a person is prior to the date of the interview if the person was deceased during the round, left the RU, was institutionalized prior to that round's interview, or left the RU to join the military.

### **Reference Person Identifiers**

The round-specific variables REFPRS31, REFPRS42, and REFPRS53 and the end-of-year status variable REFPRS01 identify the reference person for Rounds 3/1, 4/2 and 5/3, and as of December 31, 2001 (or the last round they were in the survey). In general, the reference person is defined as the household member 16 years of age or older who owns or rents the home. If more than one person meets this description, the household respondent identifies one from among them. If the respondent is unable to identify a person fitting this definition, the questionnaire asks for the head of household and this person is then considered the reference person for that RU. This information is collected in the Re-enumeration section of the CAPI questionnaire.

### **Respondent Identifiers**

The respondent is the person who answered the interview questions for the Reporting Unit (RU). The round-specific variables RESP31, RESP42, and RESP53 and the end-of-year status variable RESP01 identify the respondent for Rounds 3/1, 4/2, and 5/3 and as of December 31, 2001 (or the last round they were in the survey). Only one respondent is identified for each RU. In instances where the interview was completed in more than one session, only the first respondent is indicated.

There are two types of respondents. The respondent can be either an RU member or a non-RU member proxy. The round-specific variables PROXY31, PROXY42, and PROXY53 and the end-of-year status variable PROXY01 identify the type of respondent for Rounds 3/1, 4/2, 5/3 and as of December 31, 2001 (or the last round they were in the survey).

## Language of Interview

Language of interview (INTVLANG) was documented in the Closing section of the interview, and has the following possible values:

- 1 ENGLISH
- 2 SPANISH
- 3 ENGLISH & SPANISH
- 91 OTHER LANGUAGE
- 1 INAPPLICABLE

Although this question is round-specific, the responses were summarized to the person-level variable, INTVLANG. The hierarchy used in determining the value is as follows: 1) assign the value from the first round with a reported value recorded for each person; 2) if one is not recorded at the person level, then assign the first recorded value within the reporting unit (RU); 3) if one is not available at that level, then assign the first recorded value of the dwelling unit (DU); 4) if no value is available, then a value of –1 is assigned.

## Person Status

A number of variables describe the various components reflecting each person's status for each round of data collection. These variables provide information about a person's inscope status, keyness status, eligibility status, and disposition status. These variables include: KEYNESS, INSCOP31, INSCOP42, INSCOP53, INSCOP01, INSC1231, INSCOPE, ELGRND31, ELGRND42, ELGRND53, ELGRND01, ELIGIBLE, PSTATS31, PSTATS42, and PSTATS53. These variables are set based on sampling information and responses provided in the Re-enumeration section of the CAPI questionnaire.

Through the Re-enumeration section of the CAPI questionnaire, each member of a RU was classified as "Key" or "Non-Key", "inscope" or "out-of-scope", and "eligible" or "ineligible" for MEPS data collection. To be included in the set of persons used in the derivation of MEPS person-level estimates, a person had to be a member of the civilian noninstitutionalized population for at least one day during 2001. Because a person's eligibility for the survey might have changed since the NHIS interview, a sampling re-enumeration of household membership was conducted at the start of each round's interview. Only persons who were "inscope" sometime during the year, were "key", and responded for the full period in which they were inscope were assigned positive person-level weights and thus are to be used in the derivation of person-level national estimates from the MEPS.

Note: If analysts want to subset to infants born during 2001, then newborns should be identified using AGE01X = 0 rather than PSTATSxy = 51.

## Inscope

A person was considered as inscope during a round if he or she was a member of the U.S. civilian, noninstitutionalized population at some time during that round. The round-specific variables INSCOP31, INSCOP42, and INSCOP53 indicate a person's inscope status for Rounds 3/1, 4/2, and 5/3. INSCOP01 indicates a person's inscope status for the portion of Round 5/3 that covers 2001. The values of these variables taken in conjunction allow one to determine inscope status over time (for example, becoming inscope in the middle of a round, as would be the case for newborns). The INSCOPE variable indicates whether a person was ever inscope during the calendar year 2001. INSCOP31, INSCOP42, INSCOP53, and INSCOP01 will contain the following values and corresponding labels (for INSCOP01, "reference period" in the description below is the portion of Round 5/3 in 2001):

Value	Definition
0	Incorrectly listed, or on NHIS roster but out-of-scope prior to January 1, 2001
1	Person is inscope for the whole reference period
2	Person is inscope at the start of the RU reference period, but not at the end of the RU reference period
3	Person is not inscope at the start of RU reference period, but is inscope at the end of the RU reference period. (For example, the person is inscope from the date the person joined the RU or the person was in the military in the previous round, but is no longer in the military in the current round)
4	Person is inscope during the reference period, but neither at the reference start date nor on the reference end date. (For example, person leaves an institution, goes into community, and then dies)
5	Person is out-of-scope for all of the reference period during which he or she is in an RU member. (For example, the person is in the military)
6	Person is out-of-scope for the entire reference period and is not a member of the RU during this time period and was inscope and an RU member in an earlier round.
7	Person is not in an RU, joined in a later round (or joined the RU after December 31, 2001 for INSCOP01)
8	RU Non-response and Key persons who left an RU with no tracing info and so a new RU was not formed
9	Person is non-key or full-time in the military, not a member of an RU during this time period, and was an RU member in an earlier round

## Keyness

The term “Keyness” is related to an individual's chance of being included in MEPS. A person is Key if that person is linked for sampling purposes to the set of NHIS sampled households designated for inclusion in MEPS. Specifically, a Key person was a member of an NHIS household at the time of the NHIS interview or became a member of such a household after being out-of-scope at the time of the NHIS (examples of the latter situation include newborns and persons returning from military service, an institution, or living outside the United States).

A non-key person is one whose chance of selection for the NHIS (and MEPS) was associated with a household eligible but not sampled for the NHIS and who later became a member of a MEPS Reporting Unit. MEPS data (e.g., utilization and income) were collected for the period of time a non-key person was part of the sampled unit to provide information for family-level analyses. However, non-key persons who leave a sample household unaccompanied by a key, inscope member were not followed for subsequent interviews. Non-key individuals do not receive sample person-level weights and thus do not contribute to person-level national estimates.

The variable KEYNESS indicates a person's keyness status. This variable is not round specific. Instead, it is set at the time the person enters MEPS, and the person's keyness status never changes. Once a person is determined to be key, that person will always be key.

It should be pointed out that a person might be key even though not part of the civilian, noninstitutionalized portion of the U.S. population. For example, a person in the military may have been living with his or her civilian spouse and children in a household sampled for NHIS. The person in the military would be considered a key person for MEPS; however, such a person would not be eligible to receive a person-level sample weight if he or she was never inscope during 2001.

## **Eligibility**

The eligibility of a person for MEPS pertains to whether or not data were to be collected for that person. All of the key inscope persons of a sampled RU were eligible for data collection. The only non-key persons eligible for data collection were those who happened to be living in an RU with at least one key, inscope person. Their eligibility continued only for the time that they were living with at least one such person. The only out-of-scope persons eligible for data collection were those who were living with key inscope persons, again only for the time they were living with such a person. Only military persons can meet this description (for example, a person on full-time active duty military, living with a spouse who is key).

A person may be classified as eligible for an entire round or for some part of a round. For persons who are eligible for only part of a round (for example, persons may have been institutionalized during a round), data were collected for the period of time for which that person was classified as eligible. The round-specific variables ELGRND31, ELGRND42, ELGRND53 and the end-of-year status variable ELGRND01 indicate a person's eligibility status for Rounds 3/1, 4/2 and 5/3 and as of December 31, 2001. The ELIGIBLE variable indicates if a person was ever eligible during the calendar year 2001.

## Person Disposition Status

The round-specific variables PSTATS31, PSTATS42, and PSTATS53 indicate a person's response and eligibility status for each round of interviewing. The PSTATSxy variables indicate the reasons for either continuing or terminating data collection for each person in the MEPS. Using this variable, one could identify persons who moved during the reference period, died, were born, institutionalized or who were in the military. Analysts should note that PSTATS53 provides a summary for all of Round 5/3, including transitions that occurred after 2001.

The following codes specify the value labels for the PSTATSxy variables.

Value	Definition
-1	The person was not fielded during the round or the RU was non-response
0	Incorrectly listed in RU at NHIS - applies to MEPS Round 1 only
11	Person in original RU , not full-time active military duty
12	Person in original RU, full-time active military duty, out-of-scope for whole reference period
13	Full-time student living away from home, but associated with sampled RU
14	The person is full-time active military duty during round, is inscope for part of the reference period and is in the RU at the end of the reference period
21	The person remains in a health care institution for the whole round - Rounds 4/2 and 5/3 only
22	The person leaves an institution (health care or non-health care) and rejoins the community - Rounds 4/2 and 5/3 only
24	The person dies in a health care institution during the round (former RU member) - Rounds 4/2 and 5/3 only
31	Person from original RU, dies during reference period
32	Went to health care institution during reference period

Value	Definition
33	Went to non-healthcare institution during reference period
34	Moved from original RU, outside U.S. (not as student)
35	Moved from original RU, to a military facility while on full-time active military duty
36	Went to institution (type unknown) during reference period
41	Moved from the original RU, to new RU within U.S. (new RUs include RUs originally classified as "Student RU" but which converted to "New RU")
42	The person joins RU and is not full-time military during round
43	The person's disposition as to why the person is not in the RU is unknown or the person moves and it is unknown whether the person moved inside or outside the U.S.
44	The person leaves an RU and joins an existing RU and is not both in the military and coded as inscope during the round
51	Newborn in reference period
61	Died prior to reference period (not eligible)-Round 1 only
62	Institutionalized prior to reference period (not eligible)-Round 1 only
63	Moved outside U.S., prior to reference period (not eligible)-Round 1 only
64	Full-time military, living on a military facility, moved prior to reference period (not eligible)-Round 1 only
71	Student under 24 living away at school in grades 1-12 (Non-Key)
72	Person is dropped from the RU roster as ineligible: the person is a non-key student living away or the person is not related to reference person or the RU is the person's residence only during the school year
73	Not Key and not full-time military, moved without someone key and inscope (not eligible)
74	Moved as full-time military but not to a military facility and without someone key and inscope (not eligible this round)
81	Person moved from original RU, full-time student living away from home, did not respond



## 2.5.2 Navigating the MEPS Data with Information on Person Disposition Status

Since the variables PSTATS31, PSTATS42, and PSTATS53 indicate the reasons for either continuing or terminating data collection for each person in MEPS, these variables can be used to explain the beginning and ending dates for each individual's reference period of data collection, as well as which sections in the instrument each individual did not receive. By using the information included in the following table, analysts will be able to determine for each individual which sections of the MEPS questionnaire collected data elements for that person.

Some individuals have a reference period that spans an entire round, while other individuals may have data collected only for a portion of the round. When an individual's reference period does not coincide with the RU reference period, the individual's start date may be a later date, or the end date may be an earlier date, or both. In addition, some individuals have reference period information coded as "Inapplicable" (e.g., for individuals who were not actually in the household). The information in this table indicates the beginning and ending dates of reference periods for persons with various values of PSTATS31, PSTATS42, and PSTATS53. The actual dates for each individual can be found in the following variables included on this file: BEGRFM31, BEGRFM42, BEGRFM53, BEGRFD31, BEGRFD42, BEGRFD53, BEGRFY31, BEGRFY42, BEGRFY53, ENDRFM31, ENDRFM42, ENDRFM53, ENDRFD31, ENDRFD42, ENDRFD53, ENDRFY31, ENDRFY42, ENDRFY53, ENDRFM01, ENDRFD01, and ENDRFY01.

The table below also describes the section or sections of the questionnaire that were **NOT** asked for each value of PSTATS31, PSTATS42, and PSTATS53. For example, the condition enumeration (CE) and alternative/preventive care (AP) sections have questions that are not asked for deceased persons. The closing section (CL) also contains some questions or question rosters (see CL06A, CL35 through CL37, CL48 through CL50, CL54, CL58, and CL64) that exclude certain persons depending on whether the person died, became institutionalized, or otherwise left the RU; however, no one is considered to have skipped the entire section. Some questions or sections (e.g., health status (HE), employment (RJ, EM, EW)) are skipped if individuals are not within a certain age range. Since the PSTATS variables do not address skip patterns based on age, analysts will need to use the appropriate age variables.

The paper-and-pencil Self-Administered Questionnaire (SAQ) was designed to collect information based on two age categories during Panel 6 Round 2 and Panel 5 Round 4. A person was considered eligible to receive an SAQ if that person did not have a status of deceased or institutionalized, did not move out of the U. S. or to a military facility, was not a non-response at the time of the Round 2 or Round 4

interview date, and was 18 years of age or older. No RU members added in Round 3 or Round 5 were asked to complete an SAQ questionnaire. Because PSTATS variables do not address skip patterns based on age, this questionnaire was not included in the table below. Once again, analysts will need to use the appropriate age variables which in this case would be AGE42X. The documentation for this questionnaire appears in the SAQ section of this document under “Health Status Variables.”

Please note that the end reference date shown below for PSTATS53 reflects the Round 5/3 reference period rather than the portion of Round 5/3 that occurred during 2001.

<b>PSTAT S Value</b>	<b>PSTATS Description</b>	<b>Sections in the instrument which persons with this PSTATS value do NOT receive</b>	<b>Begin Reference Date</b>	<b>End Reference Date</b>
-1	The person was not fielded during the round or the RU was non-response	ALL sections	Inapplicable	Inapplicable
0	Incorrectly listed in RU at NHIS - Round 3/1 only	ALL sections after RE	Inapplicable	Inapplicable
11	Person in original household, not FT active military duty (Person is in the same RU as the previous round)	--	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Interview date
12	Person in original household, FT active military duty, out-of-scope for whole reference period.	--	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Interview date
13	FT student living away from home, but associated with sampled household	--	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Interview date

<b>PSTAT S Value</b>	<b>PSTATS Description</b>	<b>Sections in the instrument which persons with this PSTATS value do NOT receive</b>	<b>Begin Reference Date</b>	<b>End Reference Date</b>
14	The person is FT active military duty during round and is inscope for part of the reference period and is in the RU at the end of the reference period	--	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	PSTATS31: Interview date PSTATS42 and PSTATS53: If the person is living w/ someone Key and inscope, then the interview date. If not living w/ someone who is Key and inscope, then the date the person joined the military
21	The person remains in a health care institution for the whole round - Rounds 4/2 and 5/3 only	All sections after RE	Inapplicable	Inapplicable
22	The person leaves a health care institution and rejoins the community - Rounds 4/2 and 5/3 only	--	Date rejoined the community	Interview date
23	The person leaves a health care institution, goes into community and then dies - Rounds 4/2 and 5/3 only	Part of CE - Condition enumeration: Skip CE1 to-CE5 HE - Health status AC - Access to care Part of AP - Alternative/Preventive care: Skip AP12 to AP22	Date rejoined the community	Date of Death
24	The person dies in a health care institution during the round (former household member) - Rounds 4/2 and 5/3 only	All sections after RE	Inapplicable	Inapplicable

<b>PSTAT S Value</b>	<b>PSTATS Description</b>	<b>Sections in the instrument which persons with this PSTATS value do NOT receive</b>	<b>Begin Reference Date</b>	<b>End Reference Date</b>
31	Person from original household, dies during reference period	Part of CE - Condition enumeration: Skip CE1 to CE5 HE - Health status AC - Access to care Part of AP - Alternative/Preventive care: Skip AP12 to AP22	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Date of Death
32	Went to healthcare institution during reference period	Access to care (AC)	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Date institutionalized
33	Went to non-healthcare institution during reference period	Access to care (AC)	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Date institutionalized
34	Moved from original household, outside US	--	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Date left the RU
35	Moved from original household, to a military facility while on FT active military duty	--	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Date left the RU
36	Went to institution (type unknown) during reference period	Access to care (AC)	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Date institutionalized

<b>PSTAT S Value</b>	<b>PSTATS Description</b>	<b>Sections in the instrument which persons with this PSTATS value do NOT receive</b>	<b>Begin Reference Date</b>	<b>End Reference Date</b>
41	Moved from the original household, to new household within US (new households include RUs originally classified as a student RU but which converted to a new RU. These are individuals in an RU that has split from an RU since the previous round)	--	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Interview date
42	The person joins household and is not full-time military during round	--	The later date of January 1, 2001 and the date the person joined the RU	Interview date
43	The person's disposition as to why the person is not in the RU is unknown or the person moves and it is unknown whether the person moved inside or outside the U.S.	All sections after RE	Inapplicable	Inapplicable

<b>PSTAT S Value</b>	<b>PSTATS Description</b>	<b>Sections in the instrument which persons with this PSTATS value do NOT receive</b>	<b>Begin Reference Date</b>	<b>End Reference Date</b>
44	The person leaves an RU and joins an existing RU and is not both in the military and coded as inscope during the round	--	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date of the RU the person has joined. This may not be the interview date of the RU that the person came from	Interview date
51	Newborn in reference period	Questions where age must be > 1 Health status (HE), Disability days (DD) Employment (RJ/EM/EW) will be skipped)	PSTATS31: January 1, 2001 if born prior to 2001. The date of birth if born in 2001. PSTATS42 and PSTATS53: The later of the Prior round interview date and date of birth	Interview date
61	Died prior to reference period (not eligible)--Round 3/1 only	All sections after RE	Inapplicable	Inapplicable
62	Institutionalized prior to reference period (not eligible)--Round 3/1 only	All sections after RE	Inapplicable	Inapplicable
63	Moved outside U.S., prior to reference period (not eligible)--Round 3/1 only	All sections after RE	Inapplicable	Inapplicable
64	FT military, moved prior to reference period (not eligible)--Round 3/1 only	All sections after RE	Inapplicable	Inapplicable

<b>PSTAT S Value</b>	<b>PSTATS Description</b>	<b>Sections in the instrument which persons with this PSTATS value do NOT receive</b>	<b>Begin Reference Date</b>	<b>End Reference Date</b>
71	Student under 24 living away at school in grades 1 through 12 (Non-Key)	--	PSTATS31: January 1, 2001 PSTATS42 and PSTATS53: Prior round interview date	Interview date
72	Person is dropped from the RU roster as ineligible: the person is a Non-Key student living away or the person is not related to reference person or the RU is the person's residence only during the school year	All sections after RE	Inapplicable	Inapplicable
73	Not Key and not full-time military, moved w/o someone Key and inscope (not eligible)	All sections after RE	Inapplicable	Inapplicable
74	Moved as full-time military but not to a military facility and w/o someone Key and inscope (not eligible)	All sections after RE	Inapplicable	Inapplicable
81	Person moved from original household, FT student living away from home, did not respond	No data were collected	Inapplicable	Inapplicable

### **2.5.3 Geographic Variables (REGION31 – MSA01)**

The round-specific variables REGION31, REGION42, REGION53, and the end-of-year status variable REGION01 indicate the Census region for the RU. REGION01 indicates the region for the 2001 portion of Round 5/3. For most analyses, REGION01 should be used. The round-specific variables MSA31, MSA42, and MSA53 and the end-of-year status variable MSA01 indicate whether or not the RU is found in a metropolitan statistical area. MSA31, MSA42, and MSA53 indicate the MSA status at the time of Rounds 3/1, 4/2, and 5/3 interviews. MSA01 indicates the MSA status for the 2001 portion of Round 5/3. For most analyses, analysts should use MSA01 rather than MSA31, MSA42, or MSA53.

## **2.5.4 Demographic Variables (AGE31X – DAPID53X)**

### **General Information**

Demographic variables provide information about the demographic characteristics of each person from the MEPS-HC. The characteristics include age, sex, race, ethnicity, educational attainment, marital status, and military service. As noted below, some variables have edited and imputed values. Most demographic variables on this file were asked during every round of the MEPS interview. These variables describe data for Rounds 3, 4, and 5 of Panel 5 (Panel that started in 2000); Rounds 1, 2 and 3 of Panel 6 (Panel that started in 2001); and status as of December 31, 2001. Demographic variables that are round specific are identified by names including numbers “xy”, where x and y refer to Round numbers of Panels 5 and 6 respectively. Thus, for example, AGE31X represents the age data relevant to Round 3 of Panel 5 or Round 1 of Panel 6. As mentioned in Section 2.5.1 “Survey Administration” Variables, the variable PANEL01 indicates the panel from which the data were derived. A value of 5 indicates Panel 5 data and a value of 6 indicates Panel 6 data. The remaining demographic variables on this file are not round specific.

The variables describing demographic status of the person as of December 31, 2001 were developed in two ways. First, the age variable (AGE01X) represents the exact age as of 12/31/01, calculated from date of birth and indicates age status as of 12/31/01. For the remaining December 31<sup>st</sup> variables [i.e., related to marital status (MARRY01X, SPOUID01, SPOUIN01), student status (FTSTU01X), and the relationship to reference persons (RFREL01X)], the following algorithm was used: data were taken from Round 5/3 counterpart if non-missing; else, if missing, data were taken from the Round 4/2 counterpart; else from the Round 3/1 counterpart. If no valid data were available during any of these rounds of data collection, the algorithm assigned the missing value (other than -1 “Inapplicable”) from the first round that the person was part of the study. When all three rounds were set to -1, a value of -9 “Not Ascertained” was assigned.

### **Age**

Date of birth and age for each RU member were asked or verified during each MEPS interview (DOBMM, DOBY, AGE31X, AGE42X, AGE53X). If date of birth was available, age was calculated based on the difference between date of birth and date of interview. Inconsistencies between the calculated age and the age reported during the CAPI interview were reviewed and resolved. For purposes of confidentiality, the variables AGE31X, AGE42X, AGE53X and AGE01X were top coded at 85 years.



When date of birth was not provided but age was provided (either from the MEPS interviews or the 1999-2000 NHIS data), the month and year of birth were assigned randomly from among the possible valid options. For any cases still not accounted for, age was imputed using:

- (1) the mean age difference between MEPS participants with certain family relationships (where available) or
- (2) the mean age value for MEPS participants.

For example, a mother's age is imputed as her child's age plus 26, where 26 is the mean age difference between MEPS mothers and their children. A wife's age is imputed as the husband's age minus 3, where 3 is the mean age difference between MEPS wives and husbands.

Age was imputed in this way for 2 persons on this file. Age was determined for one additional person from data in a later round.

## **Sex**

Data on the gender of each RU member (SEX) were initially determined from the 1999 NHIS for Panel 5 and from the 2000 NHIS for Panel 6. The SEX variable was verified and, if necessary, corrected during each MEPS interview. The data for new RU members (persons who were not members of the RU at the time of the NHIS interviews) were also obtained during each MEPS Round. When gender of the RU member was not available from the NHIS interviews and was not ascertained during one of the subsequent MEPS interviews, it was assigned in the following way. The person's first name was used to assign gender if obvious (no cases were resolved in this way). If the person's first name provided no indication of gender, then family relationships were reviewed (no cases were resolved this way). If neither of these approaches made it possible to determine the individual's gender, gender was randomly assigned (0 cases).

## **Race, Race/Ethnicity, Hispanic Ethnicity, and Hispanic Ethnicity Group**

Race (RACEX) and Hispanic ethnicity (HISPANX) were asked for each RU member during the MEPS interview. If this information was not obtained in Round 1, the questions were asked in subsequent rounds. When race and/or ethnicity was not reported in the interview, values for these variables were obtained based on the following priority order. When available, they were obtained from the originally collected NHIS data. If not ascertained, the race, and/or ethnicity were assigned based on relationship to other members of the DU using a priority ordering that gave precedence to blood relatives in the immediate family (this approach was used on 91 persons to set race and 6 persons to set ethnicity). The variable

RACETHNX indicating both race and ethnicity (e.g., with categories such as “Hispanic” and “black but not Hispanic”) reflects the imputations done for RACEX and HISPANX. The specific Hispanic ethnicity group is reported in the unedited variable HISPCAT.

### **Marital Status and Spouse ID**

Current marital status was collected and/or updated during every Round of the MEPS interview. This information was obtained in RE13 and RE97 and is reported as MARRY31X, MARRY42X, MARRY53X and MARRY01X. Persons under the age of 16 were coded as 6 “Under 16 – Inapplicable”. If marital status of a specified Round differed from that of the previous Round, then the marital status of the specified Round was edited to reflect a change during the Round (e.g., married in Round, divorced in Round, separated in Round, or widowed in Round).

In instances where there were discrepancies between the marital status of two individuals within a family, other person-level variables were reviewed to determine the edited marital status for each individual. Thus, when one spouse was reported as married and the other spouse reported as widowed, the data were reviewed to determine if one partner should be coded as 8 “Widowed in Round”.

Four edits were performed to ensure some consistency across rounds. First, a person could not be coded as “Never Married” after previously being coded as any other marital status (e.g., “Widowed”). Second, a person could not be coded as “Under 16 – Inapplicable” after being previously coded as any other marital status. Third, a person could not be coded as “Married in Round” after being coded as “Married” in the Round immediately preceding. Fourth, a person could not be coded as an “in Round” code (e.g., “Widowed in Round”) in two subsequent rounds. Since marital status can change across rounds and it was not feasible to edit every combination of values across rounds, unlikely sequences for marital status across the round-specific variables do exist.

The person identifier for each individual’s spouse is reported in SPOUID31, SPOUID42, SPOUID53, and SPOUID01. These are the PIDs (within each family) of the person identified as the spouse during Round 3/1, Round 4/2, and Round 5/3 and as of December 31, 2001, respectively. If no spouse was identified in the household, the variable was coded as 995 “No spouse in household”. Those with unknown marital status are coded as 996 “Marital Status Unknown”. Persons under the age of 16 are coded as 997 “Less than 16 Years Old”.

The SPOUIN31, SPOUIN42, SPOUIN53, and SPOUIN01 variables indicate whether a person’s spouse was present in the RU during Round 3/1, Round 4/2, Round 5/3 and as of December 31, 2001 respectively. If the person had no spouse in the

household, the value was coded as 2 “Not Married/No Spouse”. For persons under the age of 16 the value was coded as 3 “Under 16 – Inapplicable”.

The SPOUID and SPOUIN variables were obtained from RE76 and RE77, where the respondent was asked to identify how each pair of persons in the household were related. Analysts should note that this information was collected in a set of questions separate from the questions that asked about marital status. While editing was performed to ensure that SPOUID and SPOUIN are consistent within each Round, there was no consistency check between these variables and marital status in a given Round. Apparent discrepancies between marital status and spouse information may be due to any of the following causes:

1. Ambiguity as to when during a Round a change in marital status occurred. This is a result of relationship information being asked for all persons living in the household at any time during the Round, while marital status is asked as of the interview date (e.g., If one spouse died during the reference period, the surviving spouse's marital status would be “Widowed in Round”, but SPOUIN and SPOUID for the same round would indicate that a spouse was present).
2. Valid discrepancies in the case of persons who are married but not living with their spouse, or separating but still living together.
3. Discrepancies that cannot be explained for either of the previous reasons.

### **Student Status and Educational Attainment**

The variables FTSTU31X, FTSTU42X, FTSTU53X and FTSTU01X indicate whether the person was a full-time student at the interview date (or 12/31/01 for FTSTU01X). These variables have valid values for all persons between the ages of 17 - 23 inclusive. When this question was asked during Round 1 of Panel 6, it was based on age as of the 2000 NHIS interview date.

Number of years of education completed is indicated in the variable EDUCYEAR. Information was obtained from questions RE 103-105. Children who are 5 years of age or older and who never attended school were coded as 0; children under the age of 5 years were coded as -1 “Inapplicable” regardless of whether or not they attended school. However, among the cases coded as -1 “Inapplicable”, there is no distinction between those who were under the age of five and others who were inapplicable, such as persons who may be institutionalized for an entire round. EDUCYEAR is based on the first round in which the number of years of education is collected for a person. The user should note that EDUCYEAR is an unedited variable and minimal data cleaning was performed on this variable.

The variable HIDEGYR, indicating highest degree of education, was obtained from three questions: highest grade completed (RE103), high school diploma (RE 104), and highest degree (RE 105). Persons under 16 years of age were coded as 8 “Under 16- Inapplicable”. In cases where the response to the highest degree question was “No degree” and the response to the highest grade question was 13 through 17 “1 or More Years of College”, the variable HIDEGYR was coded as 3 “High School Diploma”. If highest grade completed was “Refused” or “Don’t Know” for those with a “No Degree” response for the highest degree question, the variable HIDEGYR was coded as 1 “No Degree”. HIDEGYR is based on the first round in which the highest degree was collected for a person. The user should note that HIDEGYR is an unedited variable and minimal data cleaning was performed on this variable.

### **Military Service and Service Era**

Information on active duty military status was collected during each Round of the MEPS interview. Persons currently on full-time active duty status are identified in the variables ACTDTY31, ACTDTY42, and ACTDTY53. Those under 16 years of age were coded as 3 “Under 16 – Inapplicable”, and those over the age of 59 were coded as 4 “Over 59 – Inapplicable”.

The variable DIDSERVE indicates if the person ever served in the Armed Forces. Persons under the age of 16 were coded as 3 “Under 16 – Inapplicable”. Individuals currently on active duty military service were coded as 4 “Now Active Duty”. Individuals who were ever in the military based on the DIDSERVE and ACTDTY question(s) were also asked if they served in the Vietnam War era (VETVIET), the Korean War era (VETKOR), either World War I or World War II (VETWW), in the Persian Gulf (Desert Storm) (VETGULF), or another service era (VETOTH). Those under the age of 16 were coded as 3 “Under 16 – Inapplicable”, and those who never served in the military were coded as 4 “Never in military”. The military service questions were asked of everyone when they entered MEPS.

The user should note that the DIDSERVE and veteran status variables were reviewed for consistency. The veteran status variables were minimally edited to ensure that all individuals under 16 years of age were coded as 3 “Under 16 – Inapplicable” for the specific veteran-era variables. However, no other age editing was performed, and thus it is possible for age/era inconsistencies to exist (e.g., AGE31X=17 and VETVIET=Yes).

### **Relationship to the Reference Person within Reporting Units**

For each Reporting Unit (RU), the person who owns or rents the DU is usually defined as the reference person. For student RUs, the student is defined as the reference person. (For additional information on reference persons, see the documentation on survey administration variables.) The variables RFREL31X, RFREL42X, RFREL53X, and RFREL01X indicate the relationship of each individual to the reference person of the Reporting Unit (RU) in a given round. For the reference person, this variable has the value "Self"; for all other persons in the RU, relationship to the reference person is indicated by codes representing "Husband/Spouse", "Wife/Spouse", "Son", "Daughter", "Female Partner", "Male Partner", etc. A code of 91, meaning "Other Related, Specify", was used to indicate rarely observed relationship descriptions such as "Mother of Partner". If the relationship of an individual to the reference person was not ascertained during the round-specific interview, relationships between other RU members were used, where possible, to assign a relationship to the reference person. If MEPS data from calendar year 2001 were not sufficient to identify the relationship of an individual to the reference person, relationship variables from the 2000 MEPS or NHIS data were used to assign a relationship. In the event that a meaningful value could not be determined or data were missing, the relationship variable was assigned a missing value code.

For 62 cases, where two individuals' relationship indicated they were spouses, but both had marital status indicating they were not married, their relationship was changed to non-marital partners. In addition, the relationship variables were edited to insure that they did not change across rounds for RUs in which the reference person did not change, with the exception of relationships identified as partner, spouse, or foster relationships.

### **Parent Identifiers**

The variables MOPID31X, MOPID42X, MOPID53X and DAPID31X, DAPID42X, DAPID53X are round specific and are used to identify the parents (biological, adopted, or step) of the person represented on that record. MOPID##X contains the person identifier (PID) for each individual's mother if she lived in the DU in that panel/round of the survey, or a value of -1 (Inapplicable) if she did not. Similarly, DAPID##X contains the person identifier (PID) for each individual's father if he lived in the DU in that panel/round of the survey, or a value of -1 (Inapplicable) if he did not. MOPID##X and DAPID##X were constructed based on information collected in the relationship grid of the instrument each round at questions RE76 and RE77 and include biological, adopted, and step parents. Foster parents were not included. For persons who were not present in the household during a round, MOPID##X and DAPID##X have values of -1 (Inapplicable).

Edits were performed to ensure that MOPID##X and DAPID##X were consistent

with each individual's age, sex, and other relationships within the family. For instance, the gender of the parent must be consistent with the indicated relationship; mothers are at least 12 years older than the person and no more than 55 years older than the person; fathers are at least 12 years older than the person; each person has no more than one mother and no more than one father; any values set for MOPID##X and DAPID##X were removed from any person identified as a foster child; and the PID for the person's mother and father are valid PIDs for that person's DU for the 2001 Full Year File.

### **2.5.5 Income and Tax Filing Variables (SSIDIS01 – OTHIMP01)**

The file provides income and tax-related variables that were constructed primarily from data collected in the Panel 5 Round 5 and Panel 6 Round 3 Income Sections. Person-level income amounts have been edited and imputed for every record on the full-year file, with detailed imputation flags provided as a guide to the method of editing. The tax-filing variables and some program participation variables are unedited, as discussed below.

Logical editing, cold-deck imputation and weighted, sequential hot-deck imputation were used to impute income amounts for missing values (both for item non-response and for persons in the full-year file who were not in the income rounds). Reported income components were generally left unedited (with the few exceptions noted below). Thus, analysts using these data may wish to apply additional checks for outlier values that would appear to stem from mis-reporting.

The editing process began with wage and salary income, WAGEP01X. Complete responses were left unedited, and this group of people was assigned WAGIMP01 = 1, where WAGIMP01 is the imputation flag for wage and salary data. The only exception was for a small number of persons who reported zero wage and salary income despite having been employed for pay during the year according to round level data (see below). Since data on tax filing and on taxable income sources were collected using an approach that encouraged respondents to provide information from their federal tax returns, logical edits were used to assign separate income amounts to married persons whose responses were based on combined income amounts on their joint tax returns.

Persons assigned WAGIMP01=2 were those providing broad income ranges rather than giving specific dollar amounts. Weighted sequential hot-decking was used to provide these individuals with specific dollar amounts. For this imputation, donors were persons who reported specific dollar amounts within the corresponding broad income ranges. All WAGEP01X hot-deck imputations used cells defined on the basis of a conventional list of person-level characteristics including age, education, employment status, race, sex, and region.

Persons assigned WAGIMP01=3 were those who did not report wage and salary income and who were assigned WAGEP01X=0 based on not having been employed during the year.

Persons assigned WAGIMP01=4 were those who did not provide valid dollar amounts or dollar ranges, but for whom we had information from the employment sections of the survey concerning wages, hours, and weeks worked (in all jobs). These data were used to construct annualized wage amounts to be used in place of missing annual wage and salary data. Comparisons of reported and constructed wages and salaries using persons who provided both sorts of information yielded a high degree of confidence that employment data could be reliably used to derive values to serve in place of missing wage and salary information. To implement this approach, part-year responders were assumed to be fully-employed during the remainder of the year if they were employed during the period in which they provided data. An exception was made for those who either died or were institutionalized. These persons were assigned zero wages and salaries for the time they were not in MEPS.

Hot-deck imputation was used for the remaining persons with missing WAGEP01X. Donor pools included persons whose WAGEP01X amounts were edited in the steps described above. Whenever possible, the hot-deck imputations used data on whether or not the person had been employed at any point during the year (and, if available, the number of weeks worked). Imputations for persons deemed to have been employed were conditional in nature, using only donors with positive WAGEP01X amounts (WAGIMP01=5). Imputations for WAGEP01X for the remaining persons were unconditional, using both workers and non-workers as donors (WAGIMP01=6).

After editing WAGEP01X for all persons in the full-year file, the remaining income sources were edited in the following sequence: INTRP01X, BUSNP01X, FARMP01X, DIVDP01X, REFDP01X, ALIMP01X, SALEP01X, TRSTP01X, PENSP01X, IRASP01X, SSECP01X, UNEMP01X, WCMPP01X, VETSP01X, CASHP01X, OTHRP01X, CHLDP01X, SSIP01X, and PUBP01X. Income components were edited sequentially, in each case using information regarding income amounts that had already been edited (so as to maintain patterns of correlation across income sources whenever possible). In all cases, bracketed responses were edited first (using hot-deck imputations from donors in corresponding brackets who gave specific dollar amounts), followed by imputations for remaining missing values. The hot-deck imputations used cells defined on the basis of income amounts already edited and a conventional list of person-level characteristics such as age, education, employment status, race, sex, and region. In addition, hot-deck imputations for CHLDP01X used family-level information

concerning marital status and the number of children. Hot-deck imputations for SSIP01X and PUBP01X were also assigned using, in part, simulated program eligibility indicators that integrated state-level program eligibility criteria with data on family composition and income.

As with the 1998-2000 MEPS income variables, data from the National Health Interview Survey (NHIS) were incorporated in editing the 2001 variables. The NHIS sample is the frame for the new sample selected for MEPS collection each year, with a year's time lag. Data from the 1999 NHIS correspond to MEPS Panel 5, while those from the 2000 NHIS correspond to MEPS Panel 6.

Because MEPS units come from the NHIS, it is possible to match individual MEPS responding units to an NHIS unit. In some hot-decks this matching ability allowed income reciprocity indicators collected by NHIS to be used in imputing for missing data in certain MEPS income components – interest, dividends, business income, pensions, and Social Security. (Not all MEPS income categories have an equivalent in NHIS. Also, wage data were available from NHIS, but were not used in the MEPS imputation process.)

In cases where data on a particular income category were missing for a person in MEPS, the indicator in that income category on the NHIS file was employed, assuming a non-missing value. Indicators were examined for the entire tax-filing unit (two people in the case of married couples filing jointly; one person in all other cases).

Due to the nature of the skip patterns in the MEPS income section, persons who do not file federal income tax returns were more likely to not report any data about an income item than were those persons who do file tax returns. In order to compensate for this missing information, it is critical to impute from other persons who did not file tax returns (or whose filing status was unknown), because persons not filing and filers had different income patterns. For the variables INTRP01X, DIVDP01X, PENSP01X, and SSECP01X, new cold-decks were implemented beginning with the 1999 editing process to address this issue.

These cold-decks used income amounts reported in the 1995 NHIS (the last time dollar amounts, not just reciprocity data, were collected), adjusted for inflation. Donors were limited to those 1995 NHIS persons who did not file, or whose filing status was unknown, based on the MEPS Panel 1 results. The cold-decks were run prior to the hot-decks for each variable; cold-deck recipients could not be donors in the subsequent hot-decks.



A similar cold-deck imputation was introduced for certain filers (TAXFRM01) of the "short" or "EZ" 1040 form with missing data caused by the skip patterns in income collection.

Reported income amounts of less than one dollar were treated as missing amounts (to be hot-decked from donors with positive amounts of the corresponding income source). Also, a very few cases of outlier responses were edited (primarily public sources of income that exceeded possible amounts). Otherwise, reported amounts were left unchanged.

For each income component, the corresponding `xxIMP01` variable contains an indicator concerning the method for editing/imputation. All the flag variables have the following formatted values:

- 1 = Original response used;
- 2 = Bracket converted;
- 3 = Missing value set to 0;
- 4 = Weeks worked/earnings used (WAGIMP01 only);
- 5 = Conditional hot-deck;
- 6 = Unconditional hot-deck;
- 7 = Edited using NHIS data.

Missing values were set to zero when there were too few recipients to warrant hot-deck imputations of positive values (as in the case of `ALIMP01X` received by males). "Conditional hot-decks" indicate instances where the respondent indicated receipt but not a specific dollar amount. In these cases, the donor pool was restricted to persons with nonzero amounts of the income source in question. "Unconditional hot-decks" indicate instances where the donor pool included persons receiving both zero and nonzero amounts (implemented in cases where we had little or no information about a person's income source).

Total person-level income (`TTLP01X`) is the sum of all income components with the exception of `REFDP01X` and `SALEP01X` (to match as closely as possible the CPS definition of income; see Section 2.5.5.2). Some researchers may wish to define their own income measure by adding in one or both of these excluded components.

The tax variables, food stamp variables, SSI disability flag, and welfare participation flag are all completely unedited. Note that while the welfare participation flag is named `AFDC01`, in fact this variable reflects participation in Temporary Assistance for Needy Families (TANF), with respondents having been prompted with "TANF", "AFDC", and "welfare." Unedited tax variables are provided to assist researchers

building tax simulation programs. No efforts have been made to eliminate inconsistencies among these program participation and tax variables and other MEPS data. All of these unedited variables should be used with great care.

#### **2.5.5.1 Income Top-Coding**

All income amounts on the file, including both total income and the separate sources of income, were top coded to preserve confidentiality. For each income source, top codes were applied to the top percentile of all cases (including negative amounts that exceeded income thresholds in absolute value). In cases where fewer than one percent of all persons received a particular income source, all recipients were top-coded. Top-coded income amounts were masked using a regression-based approach. The regressions relied on many of the same variables used in the hot-deck imputations, with the dependent variable in each case being the natural logarithm of the amount that the income component was in excess of its top-code threshold. Predicted values from this regression were reconverted from logarithms to levels using a smearing correction, and these predicted amounts were then added back to the top-code thresholds. This approach preserves the component-by-component weighted means (both overall and among top-coded cases), while also preserving much of the income distribution conditional on the variables contained in the regressions. At the same time, this approach ensures that every reported amount in excess of its respective threshold is altered on the public use file. The process of top-coding income amounts in this way inevitably introduces measurement error in cases where income amounts were reported correctly by respondents. Note, however, that top-coding can also help to reduce the impact of outliers that occur due to reporting errors.

Total income is constructed as the sum of the adjusted income components. Having constructed total income in this manner, this total was then top-coded using the same regression-based procedure described above (again masking the top percentile of cases). Finally, the components of income were scaled up or down in order to make the sources of income consistent with the newly-adjusted totals.

#### **2.5.5.2 Poverty Status**

The file includes a categorical variable for 2001 family income as a percentage of poverty (POVCAT01). The definitions of income, family, and poverty categories used were taken from the 2001 poverty statistics developed by the Current Population Survey (CPS).

Family income was derived by constructing person-level total income comprising annual earnings from wages, salaries, bonuses, tips, commissions; business and farm gains and losses; unemployment and workers' compensation; interest and

dividends; alimony, child support, and other private cash transfers; private pensions, IRA withdrawals, social security, and veterans payments; supplemental security income and cash welfare payments from public assistance, Temporary Assistance for Needy Families, and related programs; gains or losses from estates, trusts, partnerships, S corporations, rent, and royalties; and a small amount of “other” income. Family income excluded tax refunds and capital gains. Person-level income totals were then summed over family members as defined by CPSFAMID to yield the family-level total. POVCAT01 was constructed by dividing family income by the applicable poverty line (based on family size and composition), with the resulting percentages grouped into 5 categories; negative or poor (less than 100%), near poor (100% to less than 125%), low income (125% to less than 200%), middle income (200% to less than 400%), and high income (greater than or equal to 400%). Persons missing CPSFAMID were treated as one-person families in constructing POVCAT01. Family income as well as the components of person level income have been subjected to internal editing patterns and derivation methods that are in accordance to specific definitions, and are not being released at this time. Researchers working with a family definition other than CPSFAMID may wish to create their own versions of total family income (and perhaps POVCAT01).

#### **2.5.6 Employment Variables (EMPST31 – OFFER53X)**

Employment questions were asked of all persons 16 years and older at the time of the interview. Employment variables consist of person-level indicators such as employment status and job-related variables such as hourly wage. All job-specific variables refer to a person’s current main job. The current main job, defined by the respondent, indicates the main source of employment.

Most employment variables pertain to the round interview date. The round dates are indicated by two numbers following the variable name; the first number representing the round for Panel 5 persons, the second number representing the round for Panel 6 persons. For example, EMPST31 refers to employment status on the Round 3 interview date for Panel 5 persons and employment status on the Round 1 interview date for Panel 6 persons.

With the exception of health insurance held at or offered through a current main job, no attempt has been made to logically edit any employment variables. When missing, values were imputed for certain persons’ hourly wages; however, there was no editing performed on any values reported by the respondent. Due to confidentiality concerns, hourly wages greater than or equal to \$62.50 were top-coded to –10 and the number of employees variable was top-coded at 500. With the exception of a variable indicating whether the employer has more than one location (MORE), all employer-specific variables refer to the establishment that is the location of a person’s current main job.

The MEPS employment section used dependent interviewing in Rounds 2 through 5. If employment status and certain job characteristics did not change from the previous round, as identified in the review of employment section, the respondent was skipped through the main employment section. A code of “-2” is used to indicate that the information in question was obtained in a previous round. For example, if the HRWG42X (Round 4 interview date hourly wage for Panel 5 persons or Round 2 interview date hourly wage for Panel 6 persons) is coded as “-2”, refer to HRWG31X (Round 3 interview date hourly wage for Panel 5 persons or Round 1 interview date hourly wage for Panel 6 persons) for the value for HRWG42X. Note that there may be a value for the Round 3/1 hourly wage or there may be an “Inapplicable” code (-1). The “-2” value for HRWG42X simply indicates that the person was skipped past the question at the time of the subsequent interview. To determine who should be skipped through various employment questions, certain information, such as employment status, had to be asked in every round and, thus, “-2” codes do not apply to employment status. Additionally, information on whether the person currently worked at more than one job or whether the person held health insurance from a current main employer was asked in every round, and, therefore, those variables also have no “-2” codes.

For Panel 5 persons who have a current main job in Round 3 that continues from Round 1 or 2, the “-2” code is not sufficient for those variables that the person was skipped past at the time of the interview. This is because the Panel 5 Round 1 and 2 data are not included on this release and therefore there are no data to which to refer. For such persons, the values for the variables for these skipped questions are copied from the Round 1 or 2 constructed variable on the 2000 Full Year Public Use Release, depending on the round in which the job first became the current main job. The accompanying variable RNDFLG31 indicates the round in which these data were collected. For example, if the person has a Round 3 current main job that continues from Round 2 and was first reported as the current main job in Round 2, HRWG31X will be a copy of the HRWG42X variable from the 2000 Full Year Public Use Release and RNDFLG31 will be “2”, indicating the round in which the job was first reported as the current main job.

### **Employment Status (EMPST31, EMPST42, and EMPST53)**

Employment status was asked for all persons age 16 or older. Allowable responses to the employment status questions were as follows:

“currently employed” if the person had a job at the interview date;

“has a job to return to” if the person did not work during the reference period but had a job to return to as of the interview date;

“employed during the reference period” if the person had no job at the interview date but did work during the round;

“not employed with no job to return to” if the person did not have a job at the interview date, did not work during the reference period, and did not have a job to which he or she could return.

These responses were mutually exclusive. A current main job was defined for persons who either reported that they were currently employed and identified a current main job or who reported and identified a job to return to. Therefore, job-specific information such as hourly wage exists for persons not presently working at the interview date but who have a job to return to as of the interview date.

### **Data Collection Round for Round 3/1 CMJ (RNDFLG31)**

For Panel 5, if a person’s Round 3 current main job (CMJ) is a continuation CMJ from Round 2 or Round 1, the value of most “31” variables will be copied forward from the variable representing the round in which the job was first reported as the CMJ. For persons in Panel 5, RNDFLG31 indicates the round in which the Round 3 CMJ was first reported as the CMJ and provides a timeframe for the reported wage information and other job details. RNDFLG31 is used with many “31” variables to indicate the round on which the reported information is based.

RNDFLG31 is set to “Inapplicable” (–1) for persons in either panel who are under age 16 or who do not have a CMJ in Panel 5 Round 3 or Panel 6 Round 1. For persons who are part of Panel 5, RNDFLG31 is also set to “Inapplicable” (–1) if the person is out-of-scope in the 2001 portion of Round 3. For persons who are part of Panel 6, RNDFLG31 is also set to “Inapplicable” (–1) if the person is out-of-scope in Round 1. For persons who are part of Panel 5, other values for RNDFLG31 are set as follows:

- 1 = continuing Round 3 CMJs reported first in Round 1;
- 2 = continuing Round 3 CMJs reported first in Round 2;
- 3 = jobs newly reported as current main in Round 3;
- 9 = Round 3 CMJ is a continuation CMJ (wage information and other details were not collected in Round 3) but the Round 2 CMJ record either does not exist or is not the same job. This can occur in rare instances because corrections made to a person’s record in a current file cannot be made to that record in an earlier file due to data base processing constraints.

For persons who are part of Panel 6 and reported a Round 1 CMJ, RNDFLG31 is set to “1” indicating that the job information represented in the “31” variables was collected in Round 1.

### **Self-employed (SELF31, SELF42, and SELF53)**

Information on whether an individual was self-employed at the current main job was obtained for all persons who reported a current main job. Certain questions, namely those regarding benefits and hourly wage, were not asked of the self-employed. Variables constructed from these questions indicate whether the establishment reported by wage earners (those not self-employed) as the main source of employment offered any of the following benefits:

- Paid leave to visit a doctor (PAYDR31, PAYDR42, and PAYDR53)
- Paid sick leave (SICPAY31, SICPAY42, and SICPAY53)
- Paid vacation (PAYVAC31, PAYVAC42, and PAYVAC53)
- Pension plan (RETPLN31, RETPLN42, and RETPLN53)

For persons who were self-employed at their current main job, these benefits variables were coded as “Inapplicable” (-1) for all these variables. Additionally, information on whether the firm had more than one business location (MORE31, MORE42, and MORE53) and whether the establishment was a private for-profit, nonprofit, or a government entity (JOBORG31, JOBORG42, and JOBORG53) was not applicable for self-employed persons. Conversely, the variables that identify whether a business was incorporated, a proprietorship, or a partnership (BSNTY31, BSNTY42, and BSNTY53) applied only to those who were self-employed at their current main job.

### **Hourly wage (HRWG31X, HRWG42X, HRWG53X)**

Hourly wage was asked of all persons who reported a current main job that was not self-employment (SELF31). An hourly wage was imputed using a weighted sequential hot-deck procedure for those identified as having a current main job who were not self-employed and who did not know their wage or refused to report a wage. Hourly wage for persons for whom employment status was not known was coded as “Not Ascertained” (-9). Additionally, wages were imputed for wage earners reporting a wage range and not a specific value. For each of these persons, a value was imputed from other persons on the file who did report a specific value that fell within the reported range. The variables HRWGIM31, HRWGIM42, and HRWGIM53 identify persons whose wages were imputed. Note that wages were imputed only for persons with a positive person and/or positive family weight.

For reasons of confidentiality, the hourly wage variable was top-coded. A value of – 10 indicates that the hourly wage was greater than or equal to \$62.50. The hourly wage variables on this file (HRWG31X, HRWG42X, HRWG53X) should be

considered along with their accompanying variables - HRHOW31, HRHOW42, and HRHOW53 - which indicate how the respective round hourly wage was constructed. Hourly wage could be derived, as applicable, from a large number of source variables. In the simplest case, hourly wage was reported directly by the respondent. For other persons, construction of the hourly wage was based upon salary, the time period on which the salary was based, and the number of hours worked per time period. If the number of hours worked per time period was not available, a value of 40 hours per week was assumed, as identified in the HRHOW variable.

Health Insurance (HELD31X, HELD42X, HELD53X, OFFER31X, OFFER42X, OFFER53X, CHOIC31, CHOIC42, CHOIC53, DISVW31X, DISVW42X, DISVW53X)

There are several employment-related, health insurance measures included in this release: health insurance held at a current main job (HELD31X, HELD42X, HELD53X), health insurance offered through a current main job (OFFER31X, OFFER42X, OFFER53X), and a choice of health plans available through the current main job (CHOIC31, CHOIC42, CHOIC53). The HELD and OFFER variables were logically edited using health insurance information.

Several persons indicated that they held health insurance through a current main job in the employment section and then denied this coverage later in the interview in the health insurance section. Employment section health insurance HELD variables were edited for consistency to match the health insurance measures obtained in the health insurance section. To allow for easy identification of these individuals, round-specific flag variables were constructed (DISVW31X, DISVW42X, DISVW53X). Responses in the employment section for health insurance held were recoded to be consistent with the variables in the health insurance section of the survey. Due to questionnaire skip patterns, the responses to health insurance offered were affected by editing the HELD variable. For example, if a person responded that health insurance was held from a current main job, the question relating to whether health insurance was offered was skipped. For persons who responded in the employment section that they held health insurance coverage and then disavowed the coverage in the health insurance section, we could not ascertain whether they were offered a policy. These individuals are coded as -9 for the OFFER variables.

Within the employment section, an inconsistency can occur between the held and offered information in the file. In the first round in which a person is reported as having a specific CMJ, MEPS asks if the person holds health insurance through that job. If the person does not hold insurance, then a follow-up question is asked as to whether the person was offered insurance (but declined coverage). However, if a person does hold insurance, then that person is skipped over the offered question and the offer variable (OFFER31X, OFFER42X, OFFER53X) is automatically set to "Yes" (1).

In the rounds after a CMJ is initially reported, the “held” question is asked again in each interview (whether a person originally held insurance or not). This is to determine if there has been any change in coverage. However, the offer question is not updated again after the initial round, regardless of any change in the held status. After the initial round the offer variable is set to “-2” (value determined in previous round).

For persons in the second panel for a year (Rounds 1-3), this can result in a situation where the current round’s held variable (HELD31X, HELD42X, HELD53X) equals “Yes” (1), but looking back to the original round in which the offered variable was set (which must be done since the current round’s value is “-2”), the offered value may be set to “No” (2). For persons in the first panel of a year (Rounds 3-5), the offered value is pulled forward on the file from the original round (on the prior year’s PUF) and the same discrepancy held equal “Yes”; offered equal “No” can occur.

Finally, persons under age 16 as well as persons aged 16 and older who did not hold a current main job or who were self-employed with no employees were coded as “Inapplicable” for the health insurance-related employment variables.

Hours (HOUR31, HOUR42, HOUR53)

The hours measure refers to usual hours worked per week at the current main job.

Temporary (TEMPJB31, TEMPJB42, TEMPJB53) and Seasonal (SSNLJB31, SSNLJB42, SSNLJB53) Jobs

The temporary job variables (TEMPJB31, TEMPJB42, TEMPJB53) indicate whether a current main job lasts for only a limited amount of time or until the completion of a project.

The seasonal job variables (SSNLJB31, SSNLJB42, SSNLJB53) indicate whether the CMJ is only available during certain times of the year. SSNLJB is “YES” (‘1’) if the job is year round; SSNLJB is “NO” (‘2’) if the job is only available during certain times of the year. Teachers and other school personnel who work only during the school year are considered to work year round.

Both variables are set on current main jobs whether a person is self-employed or not. Both are constructed based on questions that are round-specific, i.e., the questions are asked when a job is newly reported and when it is reviewed in subsequent rounds, even when the job ends in that round.

**Number of Employees (NUMEMP31, NUMEMP42, NUMEMP53)**



Due to confidentiality concerns, the variable indicating the number of employees at the establishment has been top coded at 500 or more employees. NUMEMP indicates the number of employees at the location of the person's current main job. For persons who reported a categorical size, we report a median estimated size from donors within the reported range.

## **Other Employment Variables**

Information about industry and occupation types for a person's current main job at the interview date is also contained in this release. Based on verbatim text fields collected during the interview, industry and occupation types were first coded by trained coders into the three-digit codes defined by the Bureau of the Census for the 1990 Census. For confidentiality reasons, these codes were then condensed. CIND31, CIND42, and CIND53 represent the condensed industry codes for a person's current main job at the interview date. COCCP31, COCCP42 and COCCP53 represent the condensed occupation codes for a person's current main job at the interview date.

Information indicating whether a person belonged to a labor union (UNION31, UNION42, and UNION53) is also contained in this release.

The day, month, and year that the current main job started for Rounds 3, 4, and 5 of Panel 5 and Rounds 1, 2, and 3 of Panel 6 are provided in this release (STJBDD31, STJBMM31, STJBYY31, STJBDD42, STJBMM42, STJBYY42, STJBDD53, STJBMM53, and STJBYY53).

There are two measures included in this release that relate to a person's work history over a lifetime. One indicates whether a person ever retired from a job as of the Round 5 interview date for Panel 5 persons or the Round 3 interview date for Panel 6 persons (EVRETIRE). The other indicates whether a person ever worked for pay as of the Round 5 interview date for Panel 5 persons or the Round 3 interview date for Panel 6 persons (EVRWRK). The latter was asked of everyone who indicated that they were not working as of the round interview date. Therefore, anyone who indicated current employment or who had a job during any of the previous or current rounds was skipped past the question identifying whether the person ever worked for pay. These individuals were coded as "Inapplicable" (-1). All persons who ever reported a job and were 55 years or older as of the round interview date were asked if they "ever retired". Since both of these variables are not round specific, there are no "-2" codes.

This release contains variables indicating the main reason a person did not work since the start of the reference period (NWK31, NWK42, and NWK53). If a person was not employed at all during the reference period (at the interview date or at any

time during the reference period) but was employed some time prior to the reference period, the person was asked to choose from a list the main reason he or she did not work during the reference period. The “Inapplicable” (-1) category for the NWK variables includes:

- Persons who were employed during the reference period;
- Persons who were not employed during the reference period and who were never employed;
- Persons who were out-of-scope the entire reference period and;
- persons who were less than 16 years old.

A measure of whether an individual had more than one job on the round interview date (MORJOB31, MORJOB42, and MORJOB53) is provided on this release. In addition to those under 16 and those individuals who were out-of-scope, the “Inapplicable” category includes those who did not report having a current main job. Because this is not a job-specific variable, there are no “-2” codes.

This release contains variables indicating if a current main job changed between the third and fourth rounds for Panel 5 persons or between the first and second rounds for Panel 6 persons (CHGJ3142) and between the fourth and fifth rounds for Panel 5 persons or between the second and third rounds for Panel 6 persons (CHGJ4253). In addition to the “Inapplicable”, “Refused”, “Don’t Know”, and “Not Ascertained” categories, the change job variables were coded to represent the following:

- 1 = person left previous round current main job and now has a new current main job;
- 2 = person still working at the previous round’s current main job but, as of the new round, no longer considers this job to be the current main job and defines a new main job (previous round’s current main job is now a current miscellaneous job);
- 3 = person left previous round’s current main job and does not have a new job;
- 4 = person did not change current main job.

Finally, this release contains the reason given by the respondent for the job change (YCHJ3142 and YCHJ4253). The reasons for a job change were listed in the CAPI questionnaire and a respondent was asked to choose the main reason from this list. In addition to those out-of-scope, those under 16, and those not having a current main job, the “Inapplicable” category for YCHJ3142 and YCHJ4253 includes workers who did not change jobs.

## **2.5.7 Health Insurance Variables (TRIJA01X-PMEDIN53)**

### **2.5.7.1 Health Insurance Indicators (TRIJA01X-INSDE01X)**

Constructed and edited variables are provided that indicate any coverage in each month of 2001 for the sources of health insurance coverage collected during the MEPS interviews (Panel 5, Rounds 3 through 5 and Panel 6, Rounds 1 through 3). In Rounds 2, 3, 4, and 5, insurance that was in effect at the previous round's interview date was reviewed with the respondent. Most of the insurance variables have been logically edited to address issues that arose during such reviews in Rounds 2, 3, 4, and 5. One edit to the private insurance variables corrects for a problem concerning covered benefits that occurred when respondents reported a change in any of their private health insurance plan names. Additional edits address issues of missing data on the time period of coverage for both public and private coverage that was either reviewed or initially reported in a given round. For TRICARE coverage (TRIJA01X – TRIDE01X), respondents who were over age 65 had their reported TRICARE coverage overturned. Additional edits, described below, were performed on the Medicare and Medicaid or State Children's Health Insurance Program (SCHIP) variables to assign persons to coverage from these sources. Observations that contain edits assigning persons to Medicare or Medicaid/SCHIP coverage can be identified by comparing the edited and unedited versions of the Medicare and Medicaid/SCHIP variables.

Public sources include Medicare, TRICARE, Medicaid, SCHIP, and other public hospital/physician coverage. State-specific program participation in non-comprehensive coverage (STAJA01– STADE01) was also identified but is not considered health insurance for the purpose of this survey.

In addition to the month-by-month indicators of coverage, there are 12 round-specific Health Insurance variables indicating coverage by an HMO or managed care plan. The variables PRVHM031/42/01 and PRVMNC31/42/01 indicate coverage by a private HMO or gatekeeper plan in Panel 6, Rounds 1 - 3, and Panel 5, Rounds 3 - 5. The variables MCDHMO31/42/01 and MDCMC31/42/01 indicate coverage by a Medicaid HMO or managed care plan in Panel 6, Rounds 1 - 3, and Panel 5, Rounds 3 - 5. Twelve other round-specific Health Insurance variables that indicate private coverage through a plan with a list of doctors and whether the plan pays for visits to non-plan doctors have been added for FY 2001. The variables PRVDRL31/42/01 indicate coverage by a private insurance source that has a book or list of doctors in Panel 6, Rounds 1 – 3, and Panel 5, Rounds 3 – 5. The variables PRDRNP31/42/01 indicate coverage by at least one private insurance plan with a book or list of doctors that pays for visits to non-plan doctors in Panel 6, Rounds 1 – 3, and Panel 5, Rounds 3 – 5. The variables PHMONP31/42/01 indicate coverage by at least one private insurance source through an HMO that pays for visits to non-plan doctors in Panel 6, Rounds 1 – 3, and Panel 5, Rounds 3 – 5. Finally, the

variables PMNCNP31/42/01 indicate coverage by at least one private insurance source through a Gatekeeper Plan that pays for visits to non-plan doctors in Panel 6, Rounds 1 – 3, and Panel 5, Rounds 3 – 5. For Panel 6, the "31" version indicates coverage at any time in Round 1, the "42" version indicates coverage at any time in Round 2, and the "01" version represents coverage at any time during the 2001 portion of Round 3. For Panel 5, the "31" version indicates coverage at any time during the 2001 portion of Round 3, the "42" version indicates coverage at any time in Round 4, and the "01" version represents coverage at any time during Round 5 (because Round 5 ends on 12/31/01).

In the health insurance section of the questionnaire, respondents reporting private health insurance were asked to identify what types of coverage they had via a checklist. If they selected prescription drug or dental coverage from this checklist, variables were constructed to indicate prescription drug or dental coverage respectively. It should be noted, however, that in some cases respondents may have failed to identify prescription drug or dental coverage that was included as part of a hospital and physician plan.

## **Medicare**

Medicare (MCRJA01 – MCRDE01) coverage was edited (MCRJA01X – MCRDE01X) for persons age 65 or over. Within this age group, individuals were assigned Medicare coverage if:

- They answered "Yes" to a follow-up question on whether or not they received Social Security benefits; or
- They were covered by Medicaid/SCHIP, other public hospital/physician coverage or Medigap coverage; or
- Their spouse was age 65 or over and covered by Medicare; or
- They reported TRICARE coverage.

## **Medicaid and Other Public Hospital/Physician Coverage**

Questions about other public hospital/physician coverage were asked in an attempt to identify Medicaid or SCHIP recipients who may not have recognized their coverage as such. These questions were asked only if a respondent did not report Medicaid or SCHIP directly. Respondents reporting other public hospital/physician coverage were asked follow-up questions to determine if their coverage was through a specific Medicaid HMO or if it included some other managed care characteristics. Respondents who identified managed care from either path were asked if they paid anything for the coverage and/or if a government source paid for the coverage.

The Medicaid/SCHIP variables (MCDJA01– MCDDE01) have been edited (MCDJA01X – MCDDE01X) to include persons who paid nothing for their other public hospital/physician insurance when such coverage was through a Medicaid HMO or reported to include some other managed care characteristics.

To assist users in further editing sources of insurance, this file contains variables constructed from the other public hospital/physician series that measure whether:

- The respondent reported some type of managed care and paid something for the coverage, Other Public A Insurance (OPAJA01 – OPADE01); and
- The respondent did not report any managed care, Other Public B Insurance (OPBJA01 – OPBDE01).

The variables OPAJA01 – OPADE01 and OPBJA01 – OPBDE01 are provided only to assist in editing and should not be used to make separate insurance estimates for these types of insurance categories.

## **Any Public Insurance in Month**

The file also includes summary measures that indicate whether or not a sample person has any public insurance in a month (PUBJA01X – PUBDE01X). Persons identified as covered by public insurance are those reporting coverage under TRICARE, Medicare, Medicaid or SCHIP, or other public hospital/physician programs. Persons covered only by state-specific programs that did not provide comprehensive coverage (STAJA01 – STADE01), for example, the Maryland Kidney Disease Program, were not considered to have public coverage when constructing the variables PUBJA01X – PUBDE01X.

## **Private Insurance**

Variables identifying private insurance in general (PRIJA01 – PRIDE01) and specific private insurance sources [such as employer/union group insurance (PEGJA01 – PEGDE01); non-group (PNGJA01 – PNGDE01); and other group (POGJA01 – POGDE01)] were constructed. Private insurance sources identify coverage in effect at any time during each month of 2001. Separate variables identify covered persons and policyholders (policyholder variables begin with the letter "H", e.g., HPEJA01 – HPEDE01). These variables indicate coverage or policyholder status within a source and do not distinguish between persons who are covered or are policyholders on one or more than one policy within a given source. In some cases, the policyholder was unable to characterize the source of insurance (PDKJA01 – PDKDE01). Covered persons (but not policyholders) are identified when the policyholder is living outside the RU (POUJA01 – POUDE01). An individual was considered to have private health insurance coverage if, at a minimum, that coverage provided benefits for hospital and physician services (including Medigap coverage). Sources of insurance with missing information regarding the type of coverage were assumed to contain hospital/physician coverage. Persons without private hospital/physician insurance were not counted as privately insured.

Health insurance through a job or union (PEGJA01 – PEGDE01, PRSJA01 – PRSDE01) was initially asked about in the Employment Section of the interview and later confirmed in the Health Insurance Section. Respondents also had an opportunity to report employer and union group insurance (PEGJA01 – PEGDE01) for the first time in the Health Insurance Section, but this insurance was not linked to a specific job.

All insurance reported to be through a job classified as self-employed with firm size of 1 (PRSJA01 – PRSDE01) was initially reported in the Employment Section and verified in the Health Insurance Section. Unlike the other employment-related variables (PEGJA01 – PEGDE01), self-employed-firm size 1 (PRSJA01 – PRSDE01) health insurance could not be reported in the Health Insurance section

for the first time. The variables PRSJA01 – PRSDE01 have been constructed to allow users to determine if the insurance should be considered employment-related.

Private insurance that was not employment-related (POGJA01 – POGDE01, PNGJA01 – PNGDE01, PDKJA01 – PDKDE01 and POUJA01 – POUDE01) was reported in the Health Insurance section only.

### **Any Insurance in Month**

The file also includes summary measures that indicate whether or not a person has any insurance in a month (INSJA01X – INSDE01X). Persons identified as insured are those reporting coverage under TRICARE, Medicare, Medicaid, SCHIP, or other public hospital/physician or private hospital/physician insurance (including Medigap plans). A person is considered uninsured if not covered by one of these insurance sources.

Persons covered only by state-specific programs that provide non-comprehensive coverage (STAJA01 – STADE01), for example, the Maryland Kidney Disease Program, and those without hospital/physician benefits (for example, private insurance for dental or vision care only, or for accidents or specific diseases) were not considered to be insured when constructing the variables INSJA01X – INSDE01X.

### **2.5.7.2 Summary Insurance Coverage Indicators (PRVEV01 - INSCOV01)**

The variables PRVEV01-UNINS01 summarize health insurance coverage for the person in 2001 for the following types of insurance: private (PRVEV01); Tricare (TRIEV01); Medicaid or SCHIP (MCDEV01); Medicare (MCREV01); other public A (OPAEV01); other public B (OPBEV01). Each variable was constructed based on the values of the corresponding 12 month to month health insurance variables described above. A value of 1 indicates that the person was covered for at least one day of at least one month during 2001. A value of 2 indicates that the person was not covered for a given type of insurance for all of 2001. The variable UNINS01 summarizes PRVEV01-OPBEV01. Where PRVEV01-OPBEV01 are all equal to 2, then UNINS01 equals 1; person was uninsured for all of 2001. Otherwise UNINS01 is set to 2, not uninsured for some portion of 2001.

For user convenience this file contains a constructed variable INSCOV01 that summarizes health insurance coverage for the person in 2001, with the following 3 values:

- 1 = ANY PRIVATE (Person had any private insurance coverage (including Tricare/VA) any time during 2001)
- 2 = PUBLIC ONLY (Person had only public insurance coverage during 2001)
- 3 = UNINSURED (Person was uninsured during all of 2001)

Please note this variable categorizes Tricare as private coverage. If an analyst wishes to consider Tricare public coverage, the variable can easily be reconstructed using the PRVEV01 and TRIEV01 variables.

### **2.5.7.3 FY 2001 PUF Managed Care Variables**

Managed care variables have been constructed from information on health insurance coverage at any time in a reference period and the characteristics of the plan. A separate set of managed care variables has been constructed for private insurance and Medicaid coverage. The purpose of these variables is to provide information on managed care participation during the portion of the three rounds (i.e., reference periods) that fall within the same calendar year.

Managed care variables for calendar year 2001 are based on responses to health insurance questions asked during the Round 3, 4, and 5 interviews of Panel 5, and the Round 1, 2, and 3 interviews of Panel 6. Each variable ends in "xy" where x and y denote the interview round for Panels 5 and 6, respectively. The variables ending in "31" and "42" correspond to the first two interviews of each Panel in the calendar year. Because Round 3 interviews typically overlap the final months of one year and the beginning months of the next year, the "31" variables for Panel 5 have been restricted to the year 2001 portion of the reference period. Similarly, the Panel 5/Round 5 and Panel 6/Round 3 interviews have been restricted to the year 2001 portion of these reference periods, and the corresponding managed care variables have been given the suffix "01" (as opposed to "53") to emphasize the restricted time frame.

Construction of the managed care variables is straightforward, but three caveats are appropriate. First, MEPS estimates of the number of persons in HMOs are higher than figures reported by other sources, particularly those based on HMO industry data. The differences stem from the use of household-reported information, which may include respondent error, to determine HMO coverage in MEPS.

Second, the managed care questions are asked about the last plan held by a respondent through his or her establishment (employer or insurer) even though the person could have had a different plan through the establishment at an earlier point during the interview period. As a result, in instances where a respondent changed his or her establishment-related insurance, the managed care variables describe the characteristics of the last plan held through the establishment.

Third, the "01" versions of the managed care variables for Panel 6 are developed from Round 3 variables that cover different time frames. The health insurance variable for Round 3 is restricted to the same calendar year as the Round 1 and 2 data. The Round 3 variables describing plan type, on the other hand, overlap the next calendar year. As a consequence, the Round 3 managed care variables may



not describe the characteristics of the last plan held in the calendar year if the person changed plans after the first of the year.

### **Medicaid Managed Care Plans**

Persons were assigned Medicaid or SCHIP coverage based on their responses to the health insurance questions or through logical editing of the survey data. The number of persons who were edited to have Medicaid or SCHIP coverage is small, but they are comprised of two distinct groups of individuals. The first group includes persons in Other Government programs that were identified as being in a Medicaid HMO or gatekeeper plan that did not require premium payment from the insured party. By definition, this group was asked about the managed care characteristics of their insurance coverage. The second group includes a small number of persons who did not report public insurance, but were classified as Medicaid recipients because they reported receiving AFDC, SSI, or WIC. The health insurance plan type questions were not asked of this group. As a consequence, the plan type could be determined for some, but not all, respondents who were assigned Medicaid coverage through logical editing of the data.

### **Medicaid HMOs**

If Medicaid/SCHIP or Other Government programs were identified as the source of hospital/physician insurance coverage, the respondent was asked about the characteristics of the plan. The variables MCDHMO31, MCDHMO42, and MCDHMO01 have been set to "Yes" if the plan was identified from a list of state names or programs for Medicaid HMOs in the area, or if an affirmative response was provided to the following question:

Under {{Medicaid/{STATE NAME FOR MEDICAID}/the program sponsored by a state or local government agency which provides hospital and physician benefits} (are/is) (READ NAME(S) FROM BELOW) signed up with an HMO, that is a Health Maintenance Organization?

[With an HMO, you must generally receive care from HMO physicians. If another doctor is seen, the expense is not covered unless you were referred by the HMO, or there was a medical emergency.]

In subsequent rounds, respondents who had been previously identified as covered by Medicaid were asked whether the name of their insurance plan had changed since the previous interview. An affirmative response triggered the previous set of questions about managed care (name on list of Medicaid HMOs or signed up with an HMO).

In each round, the variables MCDHMO31, MCDHMO42, and MCDHMO01 have five possible values:

- 1 The person was covered by a Medicaid/SCHIP HMO.
- 2 The person was covered by Medicaid/SCHIP but the plan was not an HMO.
- 3 The person was not covered by Medicaid/SCHIP.
- The person was covered by Medicaid/SCHIP but the plan type was not
- 9 ascertained.
- 
- 1 The person was out-of-scope.

### **Medicaid Gatekeeper Plans**

If the respondent did not belong to a Medicaid HMO, a third question was used to determine whether the person was in a gatekeeper plan. The variables MCDMC31, MCDMC42, and MCDMC01 were set to "Yes" if the person provided an affirmative response to the following question:

Does {{Medicaid /{STATE NAME FOR MEDICAID}}} require (READ NAME(S) BELOW) to sign up with a certain primary care doctor, group of doctors, or with a certain clinic which they must go to for all of their routine care?

Probe: Do not include emergency care or care from a specialist to which they were referred to.

In each round, the variables MCDMC31, MCDMC42, and MCDMC01 have five possible values:

- 1 The person was covered by a Medicaid/SCHIP gatekeeper plan.
- 2 The person was covered by Medicaid/SCHIP, but it was not a gatekeeper plan.
- 3 The person was not covered by Medicaid/SCHIP.
- 9 The person was covered by Medicaid/SCHIP but the plan type was not ascertained.
- 1 The person was out-of-scope.

### **Private Managed Care Plans**

Persons with private insurance were identified from their responses to questions in the health insurance section of the MEPS questionnaire. In some cases, persons were assigned private insurance as a result of comments collected during the interview, but data editing was minimal. As a consequence, most persons with private insurance were asked about the characteristics of their plan, and their responses were used to identify HMO and gatekeeper plans.

### **Private HMOs**

Persons with private insurance were classified as being covered by an HMO if they met any of the three following conditions:

1. The person reported that his or her insurance was purchased directly through an HMO,
2. The person reporting private insurance coverage identified the type of insurance company as an HMO, or
3. The person answered "Yes" to the following question:

Now I will ask you a few questions about how (POLICYHOLDER)'s insurance through (ESTABLISHMENT) works for non-emergency care.

We are interested in knowing if (POLICYHOLDER)'s (ESTABLISHMENT) plan is an HMO, that is, a health maintenance organization. With an HMO, you must generally receive care from HMO physicians. For other doctors, the expense is not covered unless you were referred by the HMO or there was a medical emergency. Is (POLICYHOLDER)'s (INSURER NAME) an HMO?

In subsequent rounds, policyholders were asked whether the name of their insurance plan had changed since the previous interview. An affirmative response triggered the detailed question about managed care (i.e., was the insurer an HMO).

Some insured persons have more than one private plan. In these cases, if the policyholder identified any plan as an HMO, the variables PRVHMO31, PRVHMO42, and PRVHMO01 were set to "Yes." If a person had multiple plans and one or more were identified as not being an HMO and the other(s) had missing plan type information, the person-level variable was set to missing. Additionally, if a person had multiple plans and none were identified as an HMO, the person-level variable was set to "No." In each round, the variables PRVHMO31, PRVHMO42, and PRVHMO01 have five possible values:

- 1 The person was covered by a private HMO.
- 2 The person was covered by private insurance, but it was not an HMO.
- 3 The person was not covered by private insurance.
- 9 The person was covered by private insurance, but the plan type was not ascertained.
- 1 The person was out-of-scope.

### **Private Gatekeeper Plans**

If the respondent did not report belonging to a private HMO, a follow up question was used to determine whether the person was in a gatekeeper plan. Persons with private insurance were classified as being covered by a gatekeeper plan if the person provided an affirmative response to the following question:

(Do/Does) (POLICYHOLDER)'S insurance plan require (POLICYHOLDER) to

sign up with a certain primary care doctor, group of doctors, or a certain clinic which (POLICYHOLDER) must go to for all of (POLICYHOLDER)'s routine care?

Probe: Do not include emergency care or care from a specialist you were referred to.

Some insured persons have more than one private plan. In these cases, if the policyholder identified any plan as a gatekeeper plan, the variables PRVMNC31, PRVMNC42, and PRVMNC01 were set to "Yes." If a person had multiple plans and one or more were identified as not being a gatekeeper plan and the other(s) had missing plan type information, the person-level variable was set to missing. Additionally, if a person had multiple plans and none were identified as a gatekeeper plan, the person-level variable was set to "No". In each round, the variables PRVMNC31, PRVMNC42, and PRVMNC01 have five possible values:

- 1 The person was covered by a private gatekeeper plan.
- 2 The person was covered by private insurance, but it was not a gatekeeper plan.
- 3 The person was not covered by private insurance.
- 9 The person was covered by private insurance, but the plan type was not ascertained.
- 1 The person was out-of-scope.

### **Private Plan that has a Book or List of Doctors**

If the respondent did not report belonging to a private gatekeeper plan, a follow up question was used to determine whether the person belonged to a plan that had a book or list of doctors. Persons with private insurance were classified as being covered by such a plan if the person provided an affirmative response to the following question:

Is there a book or list of doctors associated with the plan?

Some insured persons have more than one private plan. In these cases, if the policyholder identified any plan that had a book or list of doctors, the variables PRVDRL31, PRVDRL42, and PRVDRL01 were set to "Yes." If a person had multiple plans and one or more were identified as not being a plan that had a book or list of doctors and the other(s) had missing information, the person level variable was set to missing. Additionally, if a person had multiple plans and none were identified as a plan that had a book or list of doctors, the person level variable was set to "No." In each round, the variables PRVDRL31, PRVDRL42, and PRVDRL01 have five possible values:

- 1 The person was covered by a private insurance plan that has a book or list of doctors.

- 2 The person was covered by private insurance, but it did not have a book or list of doctors.
- 3 The person was not covered by private insurance.
- 9 The person was covered by private insurance but the plan type was not ascertained.
- 1 The person was out-of-scope.

### **Private HMO Plans that Pay for Visits to Non-Plan Doctors**

If the respondent reported that they belong to a private HMO plan, a follow up question was used to determine whether the person was in a plan that pays for visits to non-plan doctors. Persons with private HMO insurance were classified as being covered by a plan that pays for visits to non-plan doctors if the person provided an affirmative response to the following question:

Will (POLICYHOLDER)'s plan pay for any of the costs of visits to doctors who are **not** associated with (POLICYHOLDER)'s plan, even if (POLICYHOLDER) (do/does) **not** have a referral?

Some insured persons have more than one private plan. In these cases, if the policyholder identified any plan as an HMO plan that pays for visits to non-plan doctors, the variables PHMONP31, PHMONP42, and PHMONP01 were set to "Yes." If a person had multiple plans and one or more were identified as being an HMO plan that does not pay for visits to non-plan doctors and the other(s) had missing information, the person level variable was set to missing. Additionally, if a person had multiple plans and one or more were identified as being an HMO but none were identified as an HMO plan that pays for visits to non-plan doctors, the person level variable was set to "No." In each round, the variables PHMONP31, PHMONP42, and PHMONP01 have four possible values:

- 1 Person was covered by at least one private insurance source through an HMO, and the HMO pays for visits to non-plan doctors.
- 2 Person was covered by at least one private insurance source through an HMO, but the HMO does not pay for visits to non-plan doctors.
- 9 Person was covered by private insurance through an HMO and whether the HMO covers visits to non-plan doctors was refused, don't know, or not ascertained.
- 1 Person was out-of-scope for the round, was not privately insured at any time in the round, or was not covered by private insurance through an HMO.

### **Private Gatekeeper Plans that Pay for Visits to Non-Plan Doctors**

If the respondent reported that they belong to a private gatekeeper plan, a follow up question was used to determine whether the person was in a plan that pays for visits

to non-plan doctors. Persons with private gatekeeper insurance were classified as being covered by a plan that pays for visits to non-plan doctors if the person provided an affirmative response to the following question:

Will (POLICYHOLDER)'s plan pay for any of the costs of visits to doctors who are **not** associated with (POLICYHOLDER)'s plan, even if (POLICYHOLDER) (do/does) **not** have a referral?

Some insured persons have more than one private plan. In these cases, if the policyholder identified any plan as a gatekeeper plan that pays for visits to non-plan doctors, the variables PMNCNP31, PMNCNP42, and PMNCNP01 were set to "Yes." If a person had multiple plans and one or more were identified as being a gatekeeper plan that does not pay for visits to non-plan doctors and the other(s) had missing information, the person level variable was set to missing. Additionally, if a person had multiple plans and one or more was identified as being a gatekeeper plan, but none were identified as a gatekeeper plan that pays for visits to non-plan doctors, the person level variable was set to "No." In each round, the variables PMNCNP31, PMNCNP42, and PMNCNP01 have four possible values:

- 1 Person was covered by at least one private insurance source through a Gatekeeper Plan, and the plan pays for visits to non-plan doctors.
- 2 Person was covered by at least one private insurance source through a Gatekeeper Plan, but the plan does not pay for visits to non-plan doctors.
- 9 Person was covered by private insurance through a Gatekeeper Plan, and whether the plan covers visits to non-plan doctors was refused, don't know, or not ascertained.
- 1 Person was out-of-scope for the round, was not privately insured at any time in the round, or was not covered by private insurance through a Gatekeeper Plan.

### **Private Plan that has a Book or List of Doctor that Pays for Non-Plan Visits**

If the respondent reported that they belong to a plan that had a book or list of doctors, a follow up question was used to determine whether the person was in a plan that pays for visits to non-plan doctors. Persons with a private insurance plan that has a book or list of doctors were classified as being covered by a plan that pays for visits to non-plan doctors if the person provided an affirmative response to the following question:

Will (POLICYHOLDER)'s plan pay for any of the costs of visits to doctors who are **not** associated with (POLICYHOLDER)'s plan, even if (POLICYHOLDER) (do/does) **not** have a referral?

Some insured persons have more than one private plan. In these cases, if the

policyholder identified any plan as a plan that had a book or list of doctors and that pays for visits to non-plan doctors, the variables PRDRNP31, PRDRNP42, and PRDRNP01 were set to "Yes." If a person had multiple plans and one or more were identified as being a plan that had a book or list of doctors that does not pay for visits to non-plan doctors and the other(s) had missing information, the person level variable was set to missing. Additionally, if a person had multiple plans and one or more were identified as being a plan with a book or list of doctors, but none were identified as a plan that had a book or list of doctors that pays for visits to non-plan doctors, the person level variable was set to "No." In each round, the variables PRDRNP31, PRDRNP42, and PRDRNP01 have four possible values:

- 1 Person was covered by at least one private insurance plan with a book or list of doctors, and the plan pays for visits to non-plan doctors.
- 2 Person was covered by at least one private insurance plan with a book or list of doctors, but the plan does not pay for visits to non-plan doctors.
- 9 Person was covered by at least one private insurance plan with a book or list of doctors, and whether the plan covers visits to non-plan doctors was refused, don't know, or not ascertained.
- 1 Person was out-of-scope for the round, was not privately insured at any time in the round, or was not covered by any private insurance plan with a book or list of doctors.

#### **2.5.7.4 Unedited Health Insurance Variables (PREVCOVR-LIMITOT) Duration of Uninsurance**

If a person was identified as being without insurance as of January 1<sup>st</sup> in the MEPS Round 1 interview, a series of follow-up questions were asked to determine the duration of uninsurance prior to the start of the MEPS survey. If the person said he/she was covered by insurance in the 2 years prior to the MEPS Round 1 interview (PREVCOVR), the month, year (COVRMM, COVYYY), and type of coverage (Employer-sponsored (WASESTB), Medicare (WASMCARE), Medicaid (WASMCAID), CHAMPUS/CHAMPVA (WASCHAMP), VA/Military Care (WASVA), Other public (WASOTGOV, WASAFDC, WASSSI, WASSTAT1-2, WASOTHER) or Private coverage purchased through a group, association or insurance company (WASPRIV) was ascertained. For persons who were covered by health insurance on January 1<sup>st</sup>, it was ascertained if they were ever without health insurance in the previous year (NOINSBEF). The number of weeks/months without health insurance was also ascertained (NOINSTM, NOINUNIT). For persons who reported only non-comprehensive coverage as of January 1<sup>st</sup>, a question was asked to determine if they had been covered by more comprehensive coverage that paid for medical and doctors bills in the previous 2 years (MORCOVR). If they were, the most recent month and year of coverage was ascertained (INSENDMM,

INSENDYY) as was the type of coverage (see the variable names above). Note that these variables are unedited and have been taken directly as they were recorded from the raw data. There may be inconsistencies with the health insurance variables released on public use files that indicate that an individual is uninsured in January.

### **Pre-Existing Condition Exclusions/ Denial of Insurance**

All individuals, regardless of their insurance status, were also asked in Round 1 if they had ever been denied insurance (DENYINSR) and if so, due to what conditions (DNYCANC, DNYHYPER, DNYDIAB, DNYCORON, DENYOTH). Individuals insured in January were asked whether there were any limitations or restrictions on their plans due to any physical or mental health condition (INSLIMIT) and if so, which conditions caused these limitations or restrictions (LMTBACK and LIMITOT). Individuals under age 65 without any coverage in January were also asked if they had ever tried to purchase health insurance (INSLOOK). It should be noted that conditions collected in these questions were not recorded on the condition roster.

Note that the duration of uninsurance, limitation, denial and ever looked for insurance questions were only asked in Round 1. These variables are included on the file only for individuals in Panel 6 since Panel 6's Round 1 occurred in 2001 but Panel 5's Round 1 occurred in 2000. Round 1 data for Panel 5 members is contained on the 2000 Consolidated Full Year File (HC-050). The unedited health insurance variables are included on this file to facilitate longitudinal analysis. However, since they are not available for Panel 5, Round 3, they cannot be used to generate national estimates for the estimation year.

#### **2.5.7.5 Health Insurance Coverage Variables (TRICR31X - INSAT01X)**

Constructed and edited variables are provided that indicate health insurance coverage at any time in a given round as well as at the MEPS interview dates and on December 31<sup>st</sup>, 2001. Note that for respondents who left the RU before the MEPS interview date or before December 31<sup>st</sup>, the variables measuring coverage at the interview date or on December 31<sup>st</sup> represent coverage at the date the person left the RU. In addition, since Round 5 only covers the time period from the Round 4 interview date up to December 31<sup>st</sup>, values for the December 31<sup>st</sup> variables are equivalent to those for Round 5 variables for Panel 4 members.

The health insurance variables are constructed for the sources of health insurance coverage collected during the MEPS interviews (Panel 4, Rounds 3 through 5 and Panel 5, Rounds 1 through 3). Note that the Medicare variables on this file as well as the private insurance variables that indicate the particular source of private coverage (rather than any private coverage) only measure coverage at the interview



date and on December 31<sup>st</sup>. Users should also note that while the same general editing rules were followed for the month-by-month health insurance variables released on other MEPS public use files and those on this file, in a small number of cases the month-by-month variables experienced further edits performed after the variables on this file were completed. Since editing programs checking for consistencies between these sets of variables developed over time, there should be fewer discrepancies in data for calendar year 1998 and beyond than in data for the years 1996 and 1997.

In Rounds 2, 3, 4 and 5, insurance that was in effect at the previous round's interview date was reviewed with the respondent. Most of the insurance variables have been logically edited to address issues that arose during such reviews in Rounds 2, 3, 4, and 5. One edit to the private insurance variables corrects for a problem concerning covered benefits that occurred when respondents reported a change in any of their private health insurance plan names. Additional edits address issues of missing data on the time period of coverage for both public and private coverage that was either reviewed or initially reported in a given round. For Tricare coverage (TRICR31X, TRICR42X, TRICR53X, TRICR01X, TRIAT31X, TRIAT42X, TRIAT53X, TRIAT01X), respondents who were age 65 and over had their reported Tricare coverage overturned. Additional edits, described below, were performed on the Medicare and Medicaid/SCHIP variables to assign persons to coverage from these sources. Observations that contain edits assigning person to Medicare or Medicaid/SCHIP coverage can be identified by comparing the edited and unedited versions of the Medicare and Medicaid/SCHIP variables.

Public sources include Medicare, Tricare, Medicaid, SCHIP, and other public hospital/physician coverage. State-specific program participation (STAPR31, STAPR42, STAPR53, STAPR01, STPRAT31, STPRAT42, STPRAT53, STPRAT01) in non-comprehensive coverage was also identified but is not considered health insurance for the purpose of this survey.

## **Medicare**

Medicare (MCARE31, MCARE42, MCARE53 and MCARE01) coverage was edited (MCARE31X, MCARE42X, MCARE53X and MCARE01X) for persons age 65 or over. Within this age group, individuals were assigned Medicare coverage if:

They answered yes to a follow-up question on whether or not they received Social Security benefits; or

They were covered by Medicaid, SCHIP, other public hospital/physician coverage or Medigap coverage; or

Their spouse was covered by Medicare.

They reported Tricare coverage.

### **Medicaid and Other Public Hospital/Physician Coverage**

Questions about other public hospital/physician coverage were asked in an attempt to identify Medicaid or SCHIP recipients who may not have recognized their coverage as such. These questions were asked only if a respondent did not report Medicaid or SCHIP directly. Respondents reporting other public hospital/physician coverage were asked follow-up questions to determine if their coverage was through a specific Medicaid HMO or if it included some other managed care characteristics. Respondents who identified managed care from either path were asked if they paid anything for the coverage and/or if a government source paid for the coverage.

The Medicaid variables (MCAID31, MCAID42, MCAID53, MCAID01) have been edited to include persons who paid nothing for their other public hospital/physician insurance when such coverage was through a Medicaid HMO or reported to include some other managed care characteristics (MCAID31X, MCAID42X, MCAID53X, MCAID01X, MCDAT31X, MCDAT42X, MCDAT53X, MCDAT01X). The Medicaid variables also include those identified as covered by State Children's Health Insurance Program (SCHIP).

To assist users in further editing sources of insurance, this file contains variables constructed from the other public hospital/physician series that measure whether:

The respondent reported some type of managed care and paid something for the coverage, Other Public A Insurance (OTPUBA31, OTPUBA42, OTPUBA53, OTPUBA01, OTPAAT31, OTPAAT42, OTPAAT53, OTPAAT01); and

The respondent did not report any managed care, Other Public B insurance (OTPUBB31, OTPUBB42, OTPUBB53, OTPUBB01, OTPBAT31, OTPBAT42, OTPBAT53, OTPBAT01).

The variables for Other Public A and B Insurance are provided only to assist in editing and should not be used to make separate insurance estimates for these types of insurance categories.

### **Any Public Insurance**

The file also includes summary measures that indicate whether or not a sample person has any public insurance during a given round, at the interview date, or on December 31<sup>st</sup> (PUB31X, PUB42X, PUB53X, PUB01X, PUBAT31X, PUBAT42X, PUBAT53X and PUBAT01X). Persons identified as covered by public insurance are those reporting coverage under Tricare, Medicare, Medicaid, SCHIP, or other public hospital/physician programs. Persons covered only by state-specific programs that did not provide comprehensive coverage (STAPR31, STAPR42, STAPR53, STAPR01, STPRAT31, STPRAT42, STPRAT53, STPRAT01), for example, Maryland Kidney Disease Program, were not considered to have public coverage when constructing the variables PUB31X.....PUBAT01X.

### **Private Insurance**

Variables identifying private insurance in general (PRIV31, PRIV42, PRIV53, PRIV01, PRIVAT31, PRIVAT42, PRIVAT53, PRIVAT01) and specific private insurance sources [such as employer/union group insurance (PRIEU31, PRIEU42, PRIEU53, PRIEU01); non-group (PRING31, PRING42, PRING53, PRING01); and other group (PRIOG31, PRIOG42, PRIOG53, PRIOG01)] were constructed. Variables indicating any private insurance coverage are available for the following time periods: at any time in a given round, at the interview date and on December 31<sup>st</sup>. The variables for the specific sources of private coverage are only available for coverage on the interview dates and on December 31<sup>st</sup>. Note that these variables indicate coverage within a source and do not distinguish between persons who are covered on one or more than one policy within a given source. In some cases, the policyholder was unable to characterize the source of insurance (PRIDK31, PRIDK42, PRIDK53, PRIDK01). Covered persons are also identified when the policyholder is living outside the RU (PROUT31, PROUT42, PROUT53, PROUT01). An individual was considered to have private health insurance coverage if, at a minimum, that coverage provided benefits for hospital and physician services (including Medigap coverage). Sources of insurance with missing information regarding the type of coverage were assumed to contain hospital/physician coverage. Persons without private hospital/physician insurance were not counted as privately insured.

Health insurance through a job or union (PRIEU31, PRIEU42, PRIEU53, PRIEU01) was initially asked about in the Employment Section of the interview and later confirmed in the Health Insurance Section. Respondents also had an opportunity to report employer and union group insurance for the first time in the Health Insurance Section, but this insurance was not linked to a specific job.

All insurance reported to be through a job classified as self-employed with firm size of 1 (PRIS31, PRIS42, PRIS53, PRIS01) was initially reported in the Employment Section and verified in the Health Insurance Section. Unlike the other employment-

related variables, self-employed-firm size 1 health insurance could not be reported in the Health Insurance section for the first time. The variables PRIS31, PRIS42, PRIS53, PRIS01 have been constructed to allow users to determine if the insurance should be considered employment-related.

Private insurance that was not employment-related was reported in the Health Insurance section only.

### **Any Insurance in Period**

The file also includes summary measures that indicate whether or not a person has any insurance in a round, at an interview date or on December 31<sup>st</sup> (INS31X, INS42X, INS53X, INSAT31X, INSAT42X, INSAT53X, INSAT01X). Persons identified as insured are those reporting coverage under Tricare, Medicare, Medicaid, SCHIP, or other public hospital/physician or private hospital/physician insurance (including Medigap plans). A person is considered uninsured if not covered by one of these insurance sources.

Persons covered only by state-specific programs that provide non-comprehensive coverage (STAPR31, STAPR42, STAPR53, STAPR01, STPRAT31, STPRAT42, STPRAT53, STPRAT01), for example, Maryland Kidney Disease Program, and those without hospital/physician benefits (for example, private insurance for dental or vision care only, accidents or specific diseases) were not considered to be insured when constructing the variables INS31X, INS42X, INS53X, INSAT31X, INSAT42X, INSAT53X and INSAT01X.

### **Dental and Prescription Drug Private Insurance Variables (DENTIN31-DENTIN53)**

#### **Dental Private Insurance Variables**

Round specific variables (DENTIN31/42/53) are provided that indicate the respondent was covered by a private health insurance plan that included at least some dental coverage for each round of 2001. It should be noted that the information was elicited from a pick-list, code all that apply, question that asked what type of health insurance person obtained through an establishment. The list included: hospital and physician benefits including coverage through an HMO, Medigap coverage, vision coverage, dental, and prescription drugs. It is possible that some dental coverage provided by hospital and physician plans was not independently enumerated in this question. Users should also note that persons with missing information on dental benefits for all reported private plans and those who reported that they did not have dental coverage for one or more plans but had missing information on other plans are coded as not having private dental coverage.

Respondents who reported dental coverage from at least one reported private plan were coded as having private dental coverage.

### **Prescription Drug Private Insurance Variables**

Round specific variables (PMEDIN31/42/53) are provided that indicate the respondent was covered by a private health insurance plan that included at least some prescription drug insurance coverage for each round of 2001. It should be noted that the information was elicited from a pick-list, code all that apply, question that asked what type of health insurance a person obtained through an establishment. The list included: hospital and physician benefits including coverage through an HMO, Medigap coverage, vision coverage, dental, and prescription drugs. It is possible some prescription drug coverage provided by hospital and physician plans was not independently enumerated in this question. Respondents who reported prescription drug coverage from at least one reported private plan were coded as having private prescription drug coverage. Users should note that persons with missing information on prescription drug benefits for all reported private plans and those who reported that they did not have prescription drug coverage for one or more plans but had missing information on other plans are coded as not having private prescription drug coverage.

### **2.5.8 Disability Days Indicator Variables (DDNWRK31- OTHNDD53)**

The disability days section of the core interview contains questions about time lost from work or school and days spent in bed because of a physical illness or injury, or a mental or emotional problem. Data were collected on each individual in the household. These questions were repeated in each round of interviews; this file contains data from Rounds 3, 4, and 5 of the MEPS panel 5 initiated in 2000 and Rounds 1, 2, and 3 of the MEPS panel 6 initiated in 2001 respectively. The number at the end of the variable name (31, 42 or 53) identifies the Rounds in which the information was collected.

The reference period for these questions is the time period between the beginning of the panel or the previous interview date and the current interview date. In order to establish the length of a round, analysts are referred to the variables that indicate the beginning date and ending date of each Round (BEGREFD, BEGREFM, BEGREFY, ENDREFD, ENDREFM, ENDREFY). Analysts should be aware that Round 3 was conducted across years. Some data from Round 3 thus pertains to the following year. The number of disability days in Round 3 that occurred in each calendar year was not ascertained. If analysts want to create an indicator of disability days for a given calendar year, some adjustment must be made to the Round 3 data. Analysts who want to estimate disability days for a given calendar year will need to develop an algorithm for deciding what portion of reported

disability days occurred in the year of interest and what portion occurred in the following year.

The variables DDNWRK31, DDNWRK42 and DDNWRK53 represent the number of times the respondent lost a half-day or more from work because of illness, injury or mental or emotional problems during Rounds 31, 42, and 53, respectively. A response of "no work days lost" was coded zero; if the respondent did not work, these variables were coded -1 (inapplicable), for some analyses these values may have to be recoded to zero. Respondents who were less than 16 years old were not asked about work days lost, thus these variables are also coded -1 (inapplicable).

WKINBD31, WKINBD42 and WKINBD53 represent the number of work days lost during each round in which the respondent spent at least half of the day in bed. These questions were asked only of persons aged 16 and over. Persons aged 15 or younger received a code of -1 (inapplicable). If a respondent answered the preceding work loss question with "zero days" or "does not work", then the corresponding WKINBD question was coded as -1 (inapplicable).

DDNSCL31, DDNSCL42 and DDNSCL53 indicate the number of times that a respondent missed a half-day or more of school during Rounds 31, 42, or 53, respectively. These questions were asked of persons aged 3 to 22; respondents aged less than 3 or older than 22 did not receive these questions and are coded as -1 on these variables (in a small number of cases this was not done for the 1996 data, the analyst will need to make this edit when doing longitudinal analyses). A code of -1 also indicates that the person does not attend school. The analyst should be aware that there was no attempt to reconcile school days lost with the time of year (e.g., summer vacation). In order to establish time of year, analysts are referred to the variables that indicate the beginning date and ending date of each Round (BEGREFD, BEGREFM, BEGREFY, ENDREFD, ENDREFM, ENDREFY).

SCLNBD31, SCLNBD42 and SCLNBD53 represent the number of school days lost during each round in which the individual spent at least a half-day in bed. Respondents aged less than 3 or older than 22 did not receive these questions and are coded as -1 on these variables (in a small number of cases this was not done for the 1996 data, the analyst will need to make this edit when doing longitudinal analyses). If a respondent answered the preceding school days lost question with "zero days" or "does not attend school", then the corresponding SCLNBD question is coded as -1 (inapplicable).

DDBDYS31, DDBDYS42 and DDBDYS53 represent additional days, other than school or work days, in which the respondent spent at least half a day in bed, because of a physical illness, injury or a mental or emotional problem. These are the only indicators of disability days for persons who do not work or go to school. This

question was not asked of children less than one year of age (coded -1).

A final set of variables indicate if an individual took a half-day or more off from work to care for the health problems of another individual in the family. OTHDYS31, OTHDYS42, and OTHDYS53 indicate if a person missed work because of someone else's illness, injury or health care needs, for example to take care of a sick child or relative. These variables each have three possible answers: yes - missed work to care for another (coded 1); no - did not miss work to care for another (coded 2); or the person does not work (coded 2), based on responses to the DDNWRK variable for the same Round. Respondents younger than 16 were not asked these questions and are coded as -1 (in a small number of cases this was not done for the 1996 data, the analyst will need to make this edit when doing longitudinal analyses).

OTHNDD31, OTHNDD42 and OTHNDD53 indicate the number of days during each round in which work was lost because of another's health problem. Respondents younger than 16, those who do not work, and those who answer "no" to OTHDYS are skipped out of OTHNDD and receive codes of -1.

For respondents with positive weights, a minimal amount of editing was done on these variables to preserve the skip patterns. No imputation was done for those with missing data.

### **2.5.9 Access to Care Variables (ACCELI42-OTHRPR42)**

The variables ACCELI42 through OTHRPR42 describe data from the Access to Care section of the HC questionnaire, which was administered in Panel 5 Round 4 and Panel 6 Round 2 of the MEPS HC. This supplement serves a number of purposes in the MEPS HC by gathering information on three main topic areas: whether each family member has a usual source of health care, the characteristics of usual source of health care providers for the family, and barriers the family has faced in obtaining needed health care. The variable ACCELI42 indicates whether persons were eligible to receive the Access to Care questions. Persons with ACCELI42= -1 should be excluded from estimates made with the Access to Care data.

***Family members' usual source of health care.*** For each individual family member, MEPS HC ascertains whether there is a particular doctor's office, clinic, health center, or other place that the individual usually goes to if he/she is sick or needs advice about his/her health (HAVEUS42). For those family members who do not have a usual source of health care, MEPS HC ascertains the reason(s) why (YNOUSC42 through OTHREA42). If any family members changed their usual source of health care during the 12 months prior to the

interview, MEPS HC gathers information on the reason why this change was made (CHNGUS42 through YNOMOR42).

***Characteristics of usual source of health care providers for the family.*** For each unique usual source of care provider for a given family, MEPS HC asks for information on the following characteristics of the usual source of care provider:

- is the provider a medical doctor or some other type of medical provider (followed by questions which ask either the provider's medical specialty or the type of non-physician provider) (TYPEPE42), and is the provider hospital-based (TYPEPL42 and LOCATI42);
- is the provider the person or place family members would go to for new health problems, preventive health care, and referrals to other health professionals (MINORP42 through REFFRL42);
- does the provider have office hours nights and weekends, characteristics of the provider related to appointments and waiting time, ease of contacting a medical person at the provider's office by telephone (OFFHOU42 through PHONED42);
- a number of quality-related characteristics of the provider, including whether the provider generally listens to family members, asks about prescription medications other doctors may give them, and family members' confidence in and satisfaction with the care received from the provider (PRLIST42 through USCQUA42).

***Family barriers.*** Finally, the Access to Care supplement gathers information on barriers to health care for the family. This includes one question that asks if any family members have recently gone without needed health care because the family needed money to buy food, clothing, or pay for housing (NOCARE42). In addition, the respondent is asked to rate his/her satisfaction with the ability of family members to obtain health care if needed (HCNEED42). A series of two questions is asked to directly assess whether any family members experienced difficulty in obtaining any type of health care, delayed obtaining care, or did not receive health care they thought they needed due to any of the following reasons (OBTAIN42 through OTHRPR42):

- Financial/Insurance Problems, including couldn't afford care; insurance company wouldn't approve, cover, or pay for care; pre-existing condition; insurance required a referral, but couldn't get one; doctor refused to accept family's insurance plan;



- Transportation Problems, including medical care was too far away; can't drive or don't have car/no public transportation available; too expensive to get there;
- Communication Problems, including hearing impairment or loss; different language;
- Physical Problems, including hard to get into building; hard to get around inside building; no appropriate equipment in office;
- Other Problems, including couldn't get time off work; didn't know where to go to get care; was refused services; couldn't get child care; didn't have time or took too long.

### **Editing of the Access to Care Variables**

Editing consisted primarily of logical editing for consistency with skip patterns. Other editing included the construction of new variables describing the USC provider, and recoding several "other specify" text items into existing or new categorical values, which are described below.

Not all variables or categories that appear in the Access to Care section are included on the file, as some small cell sizes have been suppressed to maintain respondent confidentiality. This affects the following questions:

AC03: Category 5 was combined with 91 OTHER REASON (YNOUSC42)

AC11: Category 7 was combined with 10 OTHER NON-MD PROVIDER (TYPEPE42).

AC23: Categories 2, 4 and 8 were combined with 91 OTHER REASON (YNOMOR42)

AC25A: Categories 9, 11, 12, 13 and 17 were combined with 91 OTHER (MAINPR42)

### **Constructed Variables Describing the Usual Source of Care Provider**

The variables PROVTY42, TYPEPL42, TYPEPE42 and LOCATI42 provide information on the type and location of the usual source of care provider. These variables were constructed as follows, using one or more questionnaire items which are not included on the file:

PROVTY42 was constructed from items in the Provider Roster Section (available as a downloadable file on the MEPS Home Page), and has the following possible values:

- 1 FACILITY
- 2 PERSON
- 3 PERSON IN FACILITY PROVIDER

Question PV01 asks whether the provider is a person or a facility. For providers designated as a person, the responses to item PV05 (which indicates if the provider is part of a group practice or HMO) and items PV03/ PV10 (which indicate the provider's address), were used to determine if the provider is a "person in facility" provider (i.e., a person for whom both person and facility characteristics are known, such as "Dr. X at Y Medical Associates").

TYPEPE42 was constructed from responses to items AC10, AC11, AC11OV, AC12 and AC12OV in the Access to Care Section and describes the type of medical provider for providers indicated as person or person in facility providers (records with PROVTY42 = 1 have a value of -1 for TYPEPE42). TYPEPE42 has the following possible values:

- 1 MD- GENERAL/FAMILY PRACTICE
- 2 MD- INTERNAL MEDICINE
- 3 MD - PEDIATRICS
- 4 MD - OB/GYN
- 5 MD-SURGERY
- 6 MD - OTHER
- 7 CHIROPRACTOR
- 8 NURSE/NURSE PRACTITIONER
- 9 PHYSICIAN'S ASSISTANT
- 10 OTHER NON-MD PROVIDER
- 11 UNKNOWN

Note that the value 6 MD-OTHER includes doctors of osteopathy, as well as a small number of medical doctors whose specialty is unknown.

TYPEPL42 was constructed from responses to Access to Care items AC06 and AC07 and describes the type of place corresponding to the usual source of care provider with the following values:

- 1 HOSPITAL CLINIC OR OUTPATIENT DEPARTMENT
- 2 PRIVATE OFFICE IN HOSPITAL

3 HOSPITAL EMERGENCY ROOM  
4 NON-HOSPITAL PLACE

TYPEPL42 was only constructed for cases with provider type indicated as facility or person in facility provider (records with PROVTY42=2 have a value of -1 for TYPEPL42).

LOCATI42 was constructed from the variables PROVTY42 and TYPEPL42, and describes the location of the provider as either office based or hospital based, and if hospital based, as either emergency room or non-emergency room. LOCATI42 has the following values:

1 OFFICE  
2 HOSPITAL, NOT EMERGENCY ROOM  
3 HOSPITAL EMERGENCY ROOM

Note that all cases with PROVTY42=2 PERSON have LOCATI42 = 1 OFFICE.

These 4 variables in combination describe the usual source of care provider. For example, a group practice or clinic with no particular person named is coded as: PROVTY42 = 1 FACILITY, LOCATI42 = 1 OFFICE and TYPEPE42 = -1 INAPPLICABLE.

### **Re-coding of Additional Other Specify Text Items**

For Access to Care items AC03, AC04, AC08, AC09, AC21 and AC23, the other specify text responses were reviewed and coded as an existing or new value for the related categorical variable (for AC03, AC08, AC21 and AC23), or coded as an existing or new "yes/no" variable (for items AC04 and AC09). The following are the new codes or variables which were created from these other specify text responses.

for item AC03 - this new value was constructed for the variable YNOUSC42:

10 OTHER INSURANCE RELATED REASON

for item AC04 - the new variable OTHINS42 was constructed for insurance-related reasons

for item AC08 - these new values were constructed for the variable YGOTOU42:

8 MILITARY/VA

## 10 INSURANCE RELATED REASON

for item AC09 - the new variable INSREA42 was constructed for insurance-related reasons

for item AC21 - these new values were constructed for the variable YCHNGU42:

9 OTHER INSURANCE-RELATED REASON

10 JOB RELATED REASON

11 NEW DOCTOR WAS REFERRED OR RECOMMENDED

12 OTHER COMPLAINTS ABOUT OLD DOCTOR

for item AC23 - these new values were constructed for the variable YNOMOR42:

9 SELDOM OR NEVER SICK/NO NEED FOR DOCTOR

10 OTHER INSURANCE-RELATED REASON

### **2.5.10 Health Status Variables (RTHLTH31-DSPRX53)**

Due to the overlapping panel design of the MEPS (Round 3 for Panel 5 overlapped with Round 1 for Panel 6, Round 4 for Panel 5 coincided with Round 2 for Panel 6, and Round 5 for Panel 5 occurred at the same time as Round 3 for Panel 6), data from overlapping rounds have been combined across panels. Thus, any variable ending in "31" reflects data obtained in Round 3 of Panel 5 and Round 1 of Panel 6. Analogous comments apply to variables ending in "42" and "53". Health Status variables whose names end in "01" indicate a full-year measurement.

This data release incorporates information from calendar year 2001. However, health status data obtained in Round 3 of both Panel 5 and Panel 6 are included in variables that have names ending in "31" and "53" respectively. For persons in Panel 5, Round 3 extended from 2000 into 2001. Therefore, for these people, some information from late 2000 is included for variables that have names ending in "31". For persons in Panel 6, Round 3 extended from 2001 into 2002. Therefore, for these people, some information from early 2002 is included for variables that have names ending in "53". Note that for most Panel 5 persons, the Round 5 reference period ends on December 31, 2001; however, the Round 5 interview actually occurs in 2002. Round 5 respondents receive an instruction at the start of the Health Status (HE) section of CAPI to limit information about health status and limitations to the period ending on December 31, 2001. Nevertheless, if respondents forget or ignore this reference period instruction, some information collected in this section in Round 5 (variables ending in "53") might reflect circumstances in early 2002. Further,

health status questions asked in the Condition Enumeration (CE), Preventive Care (AP), and Priority Conditions (PC) sections of CAPI in Round 5 do not contain a similar explicit instruction that the reference period ends on December 31, 2001, although this is stated at the start of the overall interview. Hence, in these sections, respondents may also be providing health status information that pertains to 2002.

Health Status variables in this data release can be classified into several conceptually distinct sets:

- Perceived health status and ADL and IADL limitations
- Functional limitations and activity limitations
- Vision problems
- Hearing problems
- Any limitations
- Child health and preventive care
- Preventive care
- Priority conditions
- Self-administered questionnaire
- Diabetes care survey

Perceived health status and ADL and IADL limitations were measured in all rounds. Functional and activity limitations were measured in Rounds 3 and 5 for Panel 5 and Rounds 1 and 3 for Panel 6. Vision, hearing, and children's health status were measured in Round 4 for Panel 5 and Round 2 for Panel 6. Preventive care and priority conditions were measured in Round 5 of Panel 5 and Round 3 of Panel 6. The self-administered questionnaire was distributed in Round 4 of Panel 5 and Round 2 of Panel 6. The diabetes care supplement was distributed in Round 5 of Panel 5 and Round 3 of Panel 6.

In general, Health Status variables involved the construction of person-level variables based on information collected in the Condition Enumeration and Health Status sections of the questionnaire. Many Health Status questions were initially asked at the family-level to ascertain if anyone in the household had a particular problem or limitation. These were followed up with questions to determine which household member had each problem or limitation. All information ascertained at the family-level has been brought to the person-level for this file. Logical edits were performed in constructing the person-level variables to assure that family-level and person-level values were consistent. Particular attention was given to cases where missing values were reported at the family-level to ensure that appropriate information was carried to the person-level.

Inapplicable cases occurred when a question was never asked because of a skip pattern in the survey (e.g., individuals who were 13 years of age or older were not asked some follow-up verification questions; individuals older than 17 were not asked questions pertaining to children's health status). Inapplicable cases are coded as -1. In addition, deceased persons were coded as "Inapplicable" (-1).

Each of the sets of variables listed above will be described in turn.

### **2.5.10.1 Perceived Health Status and IADL and ADL Limitations**

Perceived Health Status. Perceived health status (RTHLTH31, RTHLTH42, and RTHLTH53) and perceived mental health status (MNHLTH31, MNHLTH42, and MNHLTH53) were collected in the Condition Enumeration section. These questions (CE01 and CE02) asked the respondent to rate each person in the family according to the following categories: excellent, very good, good, fair, and poor. The corresponding variables, RTPROX31, RTPROX42, RTPROX53, MNPROX31, MNPROX42, and MNPROX53, each indicate whether the ratings of physical and mental health were provided by oneself or by someone else.

IADL Help. The Instrumental Activities of Daily Living (IADL) Help or Supervision variables (IADLHP31, IADLHP42, and IADLHP53) were each constructed from a series of three questions administered in the Health Status section of the interview. The initial question (HE01) determined if anyone in the family received help or supervision with IADLs such as using the telephone, paying bills, taking medications, preparing light meals, doing laundry, or going shopping. If the response was "Yes", a follow-up question (HE02) was asked to determine which household member(s) received this help or supervision. For persons under age 13, a final verification question (HE03) was asked to confirm that the IADL help or supervision was the result of an impairment or physical or mental health problem. If the response to the final verification question was "No", IADLHP31, IADLHP42, and IADLHP53 were coded "No" for persons under the age of 13.

If no one in the family was identified as receiving help or supervision with IADLs, all members of the family were coded as receiving no IADL help or supervision. In cases where the response to the family-level question was "Refused" (-7), "Don't Know" (-8), or "Not Ascertained" (-9), all persons were coded according to the family-level response. In cases where the response to the family-level question (HE01) was "Yes" but no specific individuals were identified in the follow-up question as having IADL difficulties, all persons were coded as "Don't Know" (-8).

ADL Help. The Activities of Daily Living (ADL) Help or Supervision variables (ADLHLP31, ADLHLP42, and ADLHLP53) were each constructed in the same manner as the IADL help variables, but using questions HE04-HE06. Coding

conventions for missing data were the same as for the IADL variables.

### **2.5.10.2 Functional and Activity Limitations**

Functional Limitations. A series of questions pertained to functional limitations, which are defined as difficulty in performing certain specific physical actions. WLKLIM31 and WLKLIM53 were the filter questions, depending on the Round. These variables were derived from a question (HE09) that was asked at the family-level: "Does anyone in the family have difficulties walking, climbing stairs, grasping objects, reaching overhead, lifting, bending or stooping, or standing for long periods of time?" If the answer was "No", then all family members were coded as "No" (2) on WLKLIM31 or WLKLIM53. If the answer was "Yes", then the specific persons who had any of these difficulties were identified and coded as "Yes" (1), and remaining family members were coded as "No" (2). If the response to the family-level question was "Don't Know" (-8), "Refused" (-7), "Not Ascertained" (-9), or "Inapplicable" (-1), then the corresponding missing value code was applied to each family member's value for WLKLIM31 or WLKLIM53. If the answer to HE09 was "Yes" (1) but no specific individual was named as experiencing such difficulties, then each family member was assigned "Don't Know" (-8). Deceased persons were assigned a -1 code ("Inapplicable") for WLKLIM31 or WLKLIM53. For Rounds 3 (Panel 5) and 1 (Panel 6), if WLKLIM31 was coded "Yes" (1) for any family member, a subsequent series of questions was administered. The series of questions for which WLKLIM31 served as a filter is as follows:

- LFTDIF31 - difficulty lifting 10 pounds
- STPDIF31 - difficulty walking up 10 steps
- WLKDIF31 - difficulty walking 3 blocks
- MILDIF31 - difficulty walking a mile
- STNDIF31 - difficulty standing 20 minutes
- BENDIF31 - difficulty bending or stooping
- RCHDIF31 - difficulty reaching over head
- FNGRDF31 - difficulty using fingers to grasp

This series of questions was asked separately for each person whose response to WLKLIM31 was coded "Yes" (1). The series of questions was not asked for other individual family members whose response to WLKLIM31 was "No" (2). In addition, this series was not asked about family members who were less than 13 years of age, regardless of their status on WLKLIM31. These questions were not asked about deceased family members. In such cases (i.e., WLKLIM31 = 2, or age < 13, or PSTATS31 = 31), each question in the series was coded as "Inapplicable" (-1). Finally, if responses to WLKLIM31 were "Refused" (-7), "Don't Know" (-8), "Not Ascertained" (-9), or otherwise "Inapplicable" (-1), then each question in this series was coded as "Inapplicable" (-1).

Analysts should note that WLKLIM31 was asked of all household members, regardless of age. For the subsequent series of questions, however, persons less than 13 years old were skipped and coded as “Inapplicable”. Therefore, it is possible for someone aged 12 or less to have a code of “Yes” (1) on WLKLIM31, and also to have codes of “Inapplicable” on the subsequent series of questions.

For Rounds 5 (Panel 5) and 3 (Panel 6), the corresponding filter question was WLKLIM53.

The series of questions for which WLKLIM53 served as a filter is as follows:

- LFTDIF53 - difficulty lifting 10 pounds
- STPDIF53 - difficulty walking up 10 steps
- WLKDIF53 - difficulty walking 3 blocks
- MILDIF53 - difficulty walking a mile
- STNDIF53 - difficulty standing 20 minutes
- BENDIF53 - difficulty bending or stooping
- RCHDIF53 - difficulty reaching over head
- FNGRDF53 - difficulty using fingers to grasp

Editing conventions were the same for this “53” series of variables as they were for the corresponding “31” series described above.

Use of Assistive Technology and Social/Recreational Limitations. The variables indicating use of assistive technology (AIDHLP31 and AIDHLP53, from question HE07) and social/recreational limitations (SOCLIM31 and SOCLIM53, from question HE22) were collected initially at the family-level. If there was a “Yes” (1) response to the family-level question, a second question identified the specific individual(s) to whom the “Yes” response pertained. Each individual identified as having the difficulty was coded “Yes” (1) for the appropriate variable; all remaining family members were coded “No”. If the family-level response was “Refused” (-7), “Don’t Know” (-8), or “Not Ascertained” (-9), all persons were coded with the family-level response. In cases where the family-level response was “Yes” but no specific individual was identified as having difficulty, all family members were coded as “Don’t Know” (-8).

Work, Housework, and School Limitations. The variables indicating any limitation in work, housework, or school (ACTLIM31 and ACTLIM53) were constructed using questions HE19-HE20. Specifically, information was collected initially at the family-level. If there was a “Yes” (1) response to the family-level question (HE19), a second question (HE20) identified the specific individual(s) to whom the “Yes” (1) response pertained. Each individual identified as having a limitation was coded “Yes” (1) for



the appropriate variable; all remaining family members were coded “No” (2). If the family-level response was “Refused” (-7), “Don’t Know” (-8), or “Not Ascertained” (-9), all persons were coded with the family-level response. In cases where the family-level response was “Yes” (1) but no specific individual was identified as having difficulty, all family members were coded as “Don’t Know” (-8). Persons less than five years old were coded as “Inapplicable” (-1) on ACTLIM31 and ACTLIM53.

For Round 3 (Panel 5) or Round 1 (Panel 6), if ACTLIM31 was “Yes” (1) and the person was 5 years of age or older, a follow-up question (HE20A) was asked to identify the specific limitation or limitations for each person. These included working at a job (WRKLIM31), doing housework (HSELIM31), or going to school (SCHLIM31). Respondents could answer “Yes” (1) or “No” (2) to each activity; thus a person could report limitations in multiple activities. WRKLIM31, HSELIM31, and SCHLIM31 have values of “Yes” (1) or “No” (2) only if ACTLIM31 was “Yes” (1); each variable was coded as “Inapplicable” (-1) if ACTLIM31 was “No” (2). When ACTLIM31 was “Refused” (-7), these variables were all coded as “Refused” (-7); when ACTLIM31 was “Don’t Know” (-8), these variables were all coded as “Don’t Know” (-8); and when ACTLIM31 was “Not Ascertained” (-9), these variables were all coded as “Not Ascertained” (-9). If a person was under 5 years old or was deceased, WRKLIM31, HSELIM31, and SCHLIM31 were each coded as “Inapplicable” (-1).

An additional question (UNABLE31) was asked if the person was completely unable to work at a job, do housework, or go to school. Those respondents who were coded “No” (2), “Refused” (-7), “Don’t Know” (-8), or “Not Ascertained” (-9) on ACTLIM31, were under 5 years of age, or were deceased were coded as “Inapplicable” (-1) on UNABLE31. UNABLE31 was asked once for whichever set of WRKLIM31, HSELIM31, and SCHLIM31 the respondent had limitations; if a respondent was limited in more than one of these three activities, UNABLE31 did not specify if the respondent was completely unable to perform all of them, or only some of them.

For Rounds 5 (Panel 5) or 3 (Panel 6) corresponding variables were ACTLIM53, WRKLIM53, HSELIM53, SCHLIM53, and UNABLE53. Editing conventions were the same as those described above.

Cognitive Limitations. The variables indicating any cognitive limitation (COGLIM31 or COGLIM53, depending on the round) were collected at the family-level as a three-part question (HE24-01 to HE24-03), asking if any of the adults in the family (1) experience confusion or memory loss, (2) have problems making decisions, or (3) require supervision for their own safety. If a “Yes” response was obtained to any item, the persons affected were identified in HE25, and COGLIM31 or COGLIM53 was coded as “Yes” (1). Remaining family members not identified were coded as

“No” (2) for COGLIM31 or COGLIM53.

If responses to HE24-01 through HE24-03 were all “No”, or if two of three were “No” (2) and the remaining was “Refused” (-7), “Don’t Know” (-8), or “Not Ascertained” (-9), all family members were coded as “No” (2). If responses to the three questions were combinations of “Don’t Know” (-8), “Refused” (-7), and missing, all persons were coded as “Don’t Know” (-8). If the response to any of the three questions was “Yes” (1) but no individual was identified in HE25, all persons were coded as “Don’t Know” (-8).

The cognitive limitations variables (COGLIM31 and COGLIM53) reflect whether any of the three component questions is “Yes” (1). Respondents with one, two, or three specific cognitive limitations cannot be distinguished. In addition, because the question asked specifically about adult family members, all persons less than 18 years of age are coded as “Inapplicable” (-1) on this question.

### **2.5.10.3 Vision Problems**

A series of questions (HE26 to HE32) provides information on visual impairment. These questions were asked of all household members, regardless of age. Deceased respondents were coded as “Inapplicable” (-1).

WRGLAS42 indicates whether a person wears eyeglasses or contact lenses. This variable was based on two questions, HE26 and HE27. The initial question (HE26) determined if anyone in the family wore eyeglasses or contact lenses. If the response was “Yes” (1), a follow-up question (HE27) was asked to determine which household member(s) wore eyeglasses or contact lenses. If the family-level response was “Don’t Know” (-8), “Refused” (-7), or “Not Ascertained” (-9), all persons were coded with the family-level response. In cases where the family-level response was “Yes” (1) but no specific individual was identified as wearing glasses or contact lenses, all family members were coded as “Don’t Know” (-8).

SEEDIF42 indicates whether anyone in the family had difficulty seeing (with glasses or contacts, if used). This variable was based on two questions, HE28 and HE29. The initial question (HE28) determined if anyone in the family had difficulty seeing. If the response was “Yes” (1), a follow-up question (HE29) was asked to determine which household member(s) had a visual impairment. If the family-level response was “Don’t Know” (-8), “Refused” (-7), or “Not Ascertained” (-9), all persons were coded with the family-level response. In cases where the family-level response was “Yes” (1) but no specific individual was identified as having difficulty seeing, all family members were coded as “Don’t Know” (-8).

Three subsequent questions were asked only of individuals who had difficulty

seeing (i.e., SEEDIF42 was “Yes” (1)). Persons with no visual impairment were coded as “Inapplicable” (-1) for these questions, as were persons with “Don’t Know” (-8), “Refused” (-7), or “Not Ascertained” (-9) responses to SEEDIF42. The three subsequent questions are summarized in the three subsequent variables. BLIND42 determined if a person with difficulty seeing was blind. For persons who were not blind (BLIND42 was “No” (2)), READNW42 asked whether the person could see well enough to read ordinary newspaper print (with glasses or contacts, if used); persons who were blind were not asked this question and were coded “Inapplicable” (-1). For persons who could not read ordinary newspaper print (READNW42 was “No” (2)), RECPEP42 asked if the person could see well enough to recognize familiar people standing two or three feet away. Persons who were blind or who could read newsprint were not asked this question and were coded “Inapplicable” (-1).

VISION42 summarizes the pattern of responses to the set of visual impairment questions. Codes for VISION42 are as follows:

Value	Definition
-1	All component variables are “Inapplicable” (SEEDIF42 was -1 and BLIND42 was -1 and READNW42 was -1 and RECPEP42 was -1)
-9	One or more component variables was “Refused” (-7), “Don’t know” (-8), or “Not ascertained” (-9)
1	No difficulty seeing (SEEDIF42 was “No” (2))
2	Some difficulty seeing, can read newsprint (SEEDIF42 was “Yes” (1) and BLIND42 was “No” (2) and READNW42 was “Yes” (1))
3	Some difficulty seeing, cannot read newsprint, can recognize familiar people (SEEDIF42 was “Yes” (1) and BLIND42 was “No” (2) and READNW42 was “No” (2) and RECPEP42 was “Yes” (1))
4	Some difficulty seeing, cannot read newsprint, cannot recognize familiar people but is not blind (SEEDIF42 was “Yes” (1) and BLIND42 was “No” (2) and READNW42 was “No” (2) and RECPEP42 was “No” (2))
5	Blind (SEEDIF42 was “Yes” (1) and BLIND42 was “Yes” (1))

#### 2.5.10.4 Hearing Problems

A series of questions (HE33 to HE39) provides information on hearing impairment. These questions were asked of all household members, regardless of age. Deceased respondents were coded “Inapplicable” (-1).

HEARAD42 indicates whether a person wears a hearing aid. This variable was based on two questions, HE33 and HE34. The initial question (HE33) determined if

anyone in the family wore a hearing aid. If the response was “Yes”, a follow-up question (HE34) was asked to determine which household member(s) wore a hearing aid. If the family-level response was “Don’t Know” (-8), “Refused” (-7), or “Not Ascertained” (-9), all persons were coded with the family-level response. In cases where the family-level response was “Yes” but no specific individual was identified as wearing a hearing aid, all family members were coded as “Don’t Know” (-8).

HEARDI42 indicates whether a person had difficulty hearing (with a hearing aid, if used). This variable is based on two questions, HE35 and HE36. The initial question (HE35) determined if anyone in the family had difficulty hearing. If the response was “Yes”, a follow-up question (HE36) was asked to determine which household member had an aural impairment. If the family-level response was “Don’t Know” (-8), “Refused” (-7), or “Not Ascertained” (-9), all persons were coded with the family-level response. In cases where the family-level response was “Yes” but no specific individual was identified as using a hearing aid, all family members were coded as “Don’t Know” (-8).

Three subsequent questions were asked only of individuals who had difficulty hearing (i.e., HEARDI42 was “Yes” (1)). Persons with no hearing impairment were coded as “Inapplicable” (-1) for these questions, as were persons with “Don’t Know” (-8), “Refused” (-7), or “Not Ascertained” (-9) responses to HEARDI42. The three subsequent questions are summarized in the three subsequent variables. DEAF42 determined if a person with difficulty hearing was deaf. For persons who were not deaf (DEAF42 was “No” (2)), HEARMO42 asked whether the person could hear well enough to hear most of the things people say (with a hearing aid, if used); persons who were deaf were not asked this question and were coded as “Inapplicable” (-1). For persons who could not hear most things people say (HEARMO42 was “No” (2)), HEARSM42 asked if the person could hear well enough to hear some of the things that people say. Persons who were deaf or who could hear most conversation were not asked this question and were coded as “Inapplicable” (-1).

HEARNG42 summarizes the pattern of responses to the set of hearing impairment questions. Codes for HEARNG42 are as follows:

Value	Definition
-1	All component variables are “Inapplicable” (HEARDI42 was -1 and DEAF42 was -1 and HEARMO42 was -1 and HEARSM42 was -1)
-9	One or more component variables was “Refused” (-7), “Don’t know” (-8), or “Not ascertained” (-9)
1	No difficulty hearing (HEARDI42 was “No” (2))

Value	Definition
2	Some difficulty hearing, can hear most things people say (HEARDI42 was “Yes” (1) and DEAF42 was “No” (2) and HEARMO42 was “Yes” (1))
3	Some difficulty hearing, cannot hear most things people say, can hear some things people say (HEARDI42 was “Yes” (1) and DEAF42 was “No” (2) and HEARMO42 was “No” (2) and HEARSM42 was “Yes” (1))
4	Some difficulty hearing, cannot hear most things people say, cannot hear some things people say but is not deaf (HEARDI42 was “Yes” (1) and DEAF42 was “No” (2) and HEARMO42 was “No” (2) and HEARSM42 was “No” (2))
5	Deaf (HEARDI42 was “Yes” (1) and DEAF42 was “Yes” (1))

#### **2.5.10.5 Any Limitation Rounds 3, 4, and 5 (Panel 5) / Rounds 1, 2, and 3 (Panel 6)**

ANYLIM01 summarizes whether a person has any ADL, IADL, activity, functional, or sensory limitations in any of the pertinent rounds. This variable was derived based on data from Rounds 3, 4, and 5 (Panel 5) or Rounds 1, 2, and 3 (Panel 6). ANYLIM01 was built using the component variables IADLHP31, IADLHP42, IADLHP53, ADLHLP31, ADLHLP42, ADLHLP53, WLKLIM31, WLKLIM42, WLKLIM53, ACTLIM31, ACTLIM53, SEEDIF42, and HEARDI42. (The latter two variables, discussed above, indicate any visual or hearing impairment, respectively.) If any of these components was coded “Yes”, then ANYLIM01 was coded “Yes” (1). If all components were coded “No”, then ANYLIM01 were coded “No” (2). If all the components were “Inapplicable” (-1), then ANYLIM01 was coded as “Inapplicable” (-1). If all the components had missing value codes (i.e., -7, -8, -9, or -1), then ANYLIM01 was coded as “Not Ascertained” (-9). If some components were “No” and others had missing value codes, ANYLIM01 was coded as “Not Ascertained” (-9). The exception to this latter rule was for children younger than five years old, who were not asked questions that are the basis for ACTLIM31 or ACTLIM53; for these respondents, if all other components were “No”, then ANYLIM01 was coded as “No” (2). The variable label for ANYLIM01 departs slightly from conventions. Typically, variables that end in “01” refer only to 2001. However, some of the variables used to construct ANYLIM01 were assessed in 2002, so some information from early 2002 is incorporated into this variable.

#### **2.5.10.6 Child Health and Preventive Care**

Starting in 2001, a Child Health and Preventive Care section was added to Rounds 2 and 4 of MEPS, and it contains questions that had been in the 2000 Parent Administered Questionnaire, selected children's questions that had been asked in previous years, and additional child preventive care questions. Questions were asked about each child (under the age of 18 excluding deceased children) in the applicable age subgroups to which they pertained. For the Child Supplement variables, a code of "Inapplicable" (-1) was assigned if a person was deceased, was not in the appropriate Round 2 or 4, or was not in the applicable age subgroup as of the interview date. This public use dataset contains variables and frequency distributions from the Child Health Preventive Care Section associated with 9,575 children (where LSHLTH42 is not equal to -1). Of these children, 9,235 were assigned a positive person-level weight for 2001 (PERWT01F > 0). Questions in this section that previously had been in the Parent Administered Questionnaire in 2000 may produce slightly different estimates in 2001 due to the change in mode from a self-administered parent questionnaire in 2000 to an interviewer administered questionnaire in 2001.

Children's General Health Status Questions (ages 0 - 17). Several questions from the General Health Subscale of the Child Health Questionnaire were asked about all children ages 0 through 17. The questions asked starting in 2001 are slightly different from the questions asked in previous years. A key reference for the Child Health Questionnaire is:

Landgraf JM, Abaetz L., Ware JE. The CHQ User's Manual. First Edition. Boston, MA: The Health Institute, New England Medical Center, 1996.

Four questions asked for ratings of the child's health on a 5-point scale, ranging from "Definitely True" (1) to "Definitely False" (5). These questions were:

- LSHLTH42 - child seems less healthy than other children
- NEVILL42 - child has never been seriously ill
- SICEAS42 - child usually catches whatever is going around
- HLTHLF42 - expect child will have a healthy life
- WRHLTH42 - worry more than is usual about child's health

Children with Special Health Care Needs Screener (ages 0 - 17). The Children with Special Health Care Needs (CSHCN) Screener instrument was developed through a national collaborative process as part of the Child and Adolescent Health Measurement Initiative (CAHMI) under the coordination by the Foundation for Accountability. A key reference for this screener instrument is:

Bethel CD, Read D, Stein REK, Blumberg SJ, Wells N, Newacheck PW. Identifying Children with Special Health Care Needs: Development and Evaluation of a Short Screening Instrument. *Ambulatory Pediatrics* Volume 2, No. 1, January-February 2002, pp 38-48.

These questions are asked about children ages 0 –17 and had been asked in the 2000 PAQ. In general, the CSHCN screener identifies children with activity limitation or need or use of more health care or other services than is usual for most children of the same age. When a response to a gate question was set to “No” (2), “Refused” (-7), “Don’t Know” (-8), or “Not Ascertained” (-9), follow-up variables based on the gate question were coded as “Inapplicable” (-1).

The variable CSHCN42 that identifies children with special health care needs was created using the Children with Special Health Care Needs (CSHCN) Screener instrument according to the specifications in the reference above. The CSHCN screener instrument consists of a series of question-sequences about the following five health consequences: the need or use of medicines prescribed by a doctor; the need or use of more medical care, mental health, or education services than is usual for most children; being limited or prevented in doing things most children can do; the need or use of special therapy such as physical, occupational, or speech therapy; and the need or use of treatment or counseling for emotional, developmental, or behavioral problems. Parents who responded "yes" to any of the "initial" questions in the 5 question sequences were then asked to respond to up to 2 follow-up questions about whether the health consequence was attributable to a medical, behavioral, or other health condition lasting or expected to last at least 12 months. Children with positive responses to at least one of the five health consequences along with all of the follow-up questions were identified as having a Special Health Care Need. Children with a "no" response for at least one question for each of the five question-sequences were considered NOT to have a Special Health Care Need. Those children whose "special health care need" status could not be determined (due to missing data for some of the questions) were coded as having the Special Health Care Need Status missing. More information about the CSHCN screener questions can be obtained from ([www.facct.org](http://www.facct.org)).

The following variables were created from the questions in the CSHCN Screener:

CHPMED42 -	child needs or uses prescribed medicines
CHPMHB42 -	prescribed medicines were because of a medical, behavioral, or other health condition
CHPMC42 -	health condition that causes a person to need prescribed medicines has lasted or is expected to last for at least 12 months
CHSERV42 -	child needs or uses more medical care, mental

health, or education services than is usual for most children of the same age

- CHSRHB42 - child needs or uses more medical and other service because of a medical, behavioral, or other health condition
- CHSRCN42 - health condition that causes a person to need or use more medical and other services has lasted or is expected to last for at least 12 months
- CHLIMI42 - child is limited or prevented in any way in ability to do the things most children of the same age can do
- CHLIHB42 - child is limited in the ability to do the things most children can do because of a medical, behavioral, or other health condition
- CHLICO42 - health condition that causes a person to be limited in the ability to do the things most children can do has lasted or is expected to last for at least 12 months
- CHTHER42 - child needs or gets special therapy such as physical, occupational, or speech therapy
- CHTHHB42 - child needs or gets special therapy because of a medical, behavioral, or other health condition
- CHTHCO42 - health condition that causes a person to need or get special therapy has lasted or is expected to last for at least 12 months
- CHCOUN42 - child has an emotional, developmental, or behavioral problem for which he or she needs or gets treatment or counseling
- CHEMPB42 - problem for which a person needs or gets treatment or counseling is a condition that has lasted or is expected to last for at least 12 months
- CSHCN42 - Identifies children with special health care needs

Columbia Impairment Scale (ages 5 - 17). These questions inquired about possible child behavioral problems and were asked in previous years. Respondents were asked to rate on a scale from 0 to 4, where "0" indicates "No Problem" and "4" indicates "A Very Big Problem", how much of a problem the child has with thirteen specified activities. A key reference for the Columbia Impairment Scale is:

Bird HR, Andrews H, et. al. "Global Measures of Impairment for Epidemiologic and Clinical Use with Children and Adolescents." *International Journal of Methods in Psychiatric Research*, vol. 6, 1996, pp.



295-307.

Certain questions in this series were coded to “Asked, but Inapplicable” (99) when the question was not applicable for a specific child. For example, if a child’s mother was deceased, a question about how much of a problem a child has getting along with his/her mother would be set to “Asked, but Inapplicable” (99). Similarly, the question about problems getting along with siblings would be set to “Asked, but Inapplicable” (99) for children with no siblings. Variables in this set include:

MOMPRO42 -	getting along with mother
DADPRO42 -	getting along with father
UNHAP42 -	feeling unhappy or sad
SCHLBH42 -	(his/her) behavior at school
HAVFUN42 -	having fun
ADUPRO42 -	getting along with adults
NERVAF42 -	feeling nervous or afraid
SIBPRO42 -	getting along with brothers and sisters
KIDPRO42 -	getting along with other kids
SPRPRO42 -	getting involved in activities like sports or hobbies
SCHPRO42 -	(his/her) schoolwork
HOMEBH42 -	(his/her) behavior at home
TRBLE42 -	staying out of trouble

CAHPS® (ages 0 - 17). The health care quality measures were taken from the health plan version of CAHPS®, an AHRQ sponsored family of survey instruments designed to measure quality of care from the consumer’s perspective and had been asked in the 2000 PAQ. All of the CAHPS variables refer to events experienced in the last 12 months. The variables included from the CAHPS® are:

CHRTCR42 -	whether any appointments were made to see a doctor or other health provider for regular or routine care
CHRTWW42 -	how often a person got an appointment for regular or routine health care as soon as was wanted (coded as “-1 Inapplicable” when CHRTCR42=2, -7, -8, or -9)
CHILCR42 -	whether a person had an illness or injury that needed care right away from a doctor’s office, clinic, or emergency room
CHILWW42 -	how often a person got care as soon as was wanted for

	an illness or injury (coded as “-1 Inapplicable” when CHILCR42=2, -7, -8, or -9)
CHAPPT42 -	how many times a person went to a doctor’s office or clinic for care
CHNECR42 -	how much of a problem it was to get a person the care that the parent or a doctor believed necessary (coded as “-1 Inapplicable” when CHAPPT42=0, -7, -8, or -9)
CHLIST42 -	how often a person’s doctors or other health providers listened carefully to the parent (coded as “-1 Inapplicable” when CHAPPT42=0, -7, -8, or -9)
CHEXPL42 -	how often a person’s doctors or other health providers explained things in a way the parent could understand (coded as “-1 Inapplicable” when CHAPPT42=0, -7, -8, or -9)
CHRESP42 -	how often a person’s doctors or other health providers showed respect for what the parent had to say (coded as “-1 Inapplicable” when CHAPPT42=0, -7, -8, or -9)
CHPRTM42 -	how often doctors or other health providers spent enough time with a person and parent (coded as “-1 Inapplicable” when CHAPPT42=0, -7, -8, or -9)
CHHECR42 -	rating of health care from 0 to 10 where 0 =Worst health care possible and 10=Best health care possible (coded as “-1 Inapplicable” when CHAPPT42=0, -7, -8, or -9)
CHSPEC42 -	whether a person needed to see a specialist
CHPRRE42 -	how much of a problem it was to get a referral to a specialist (coded as “-1 Inapplicable” when CHSPEC42=0, -7, -8, or -9)

Child Preventive Care (age range depends on question). A series of questions was asked about amounts and types of preventive care a child may receive when going to see a doctor or other health provider. Questions are asked of children of different age groups depending on the nature of the questions. When a response to a gate question was set to “No” (2), “Refused” (-7), “Don’t Know” (-8), or “Not Ascertained” (-9), follow-up variables based on the gate question were coded as “Inapplicable” (-1). Variables in this set include:

MESHGT42 -	doctor or other health provider ever measured child's height (0 – 17)
WHNHGT42 -	when doctor or other health provider measured child's height (0 – 17)
MESWGT42 -	doctor or other health provider ever measured child's weight (0 – 17)
WHNWGT42 -	when doctor or other health provider measured child's weight (0 – 17)
CHBMIX42 -	child's Body Mass Index (BMI) as based on child's reported height and weight (3 – 17)
MESVIS42 -	doctor or other health provider ever checked child's vision (3 – 6)
MESBPR42 -	doctor or other health provider ever checked child's blood pressure (2 – 17)
WHNBPR42 -	when doctor or other health provider checked child's blood pressure (2 – 17)
DENTAL42 -	doctor or other health provider ever advised a dental checkup (2 – 17)
WHNDEN42 -	when doctor or other health provider advised a dental checkup (2 – 17)
EATHLT42 -	doctor or other health provider ever given advice about child's eating healthy (2 – 17)
WHNEAT42 -	when doctor or other health provider gave advice about eating healthy (2 – 17)
PHYSCL42 -	doctor or other health provider ever given advice about the amount and kind of exercise, sports or physically active hobbies the child should have (2 – 17)
WHNPHY42 -	when doctor or other health provider gave advice about exercise (2 – 17)
SAFEST42 -	doctor or other health provider ever given advice about using a safety seat when child rides in the car (weight <= 40 pounds or age 0 - 4 if weight is missing)
WHNSAF42 -	when doctor or other health provider gave advice about using a safety seat (weight <= 40 pounds or age 0 - 4 if weight is missing)

BOOST42 -	doctor or other health provider ever given advice about using a booster seat when child rides in the car (weight between 41 and 80 pounds or age > 4 and age <= 9 if weight is missing)
WHNBST42 -	when doctor or other health provider gave advice about using a booster seat (weight between 41 and 80 pounds or age > 4 and age <= 9 if weight is missing)
LAPBLT42 -	doctor or other health provider ever given advice about using lap and shoulder belts when child rides in the car (weight > 80 pounds or age > 9 if weight is missing)
WHNLAP42 -	when doctor or other health provider gave advice about using lap and shoulder belts (weight > 80 pounds or age > 9 if weight is missing)
HELMET42 -	doctor or other health provider ever given advice about the child's using a helmet when riding a bicycle or motorcycle (2 – 17)
WHNHEL42 -	when doctor or other health provider gave advice about the child's using a helmet when riding a bicycle or motorcycle (2 – 17)
NOSMOK42 -	doctor or other health provider ever given advice about how smoking in the house can be bad for child's health (0 – 17)
WHNSMK42 -	when doctor or other health provider gave advice about how smoking in the house can be bad for the child's health (0 – 17)
TIMALN42 -	during last health care visit, doctor or other health provider spent any time alone with the child (12 – 17)

Due to confidentiality concerns and restrictions, the variables HGTFT42, HGTIN42, WGTLB42 and WGTOZ42, which were included on the Full-Year 2000 file, will not be included on the Full-Year 2001 file. Instead, a Body Mass Index (BMI) variable, CHBMIX42, was calculated for children 3-17 years old. All children age 2 and under were given a “-1 Inapplicable” code for the variable CHBMIX42. This variable is included in the 2001 file and on the above list. Please note: analysts can have access to the height and weight variables and/or construct a BMI variable of their own through the MEPS Data Center. To access information on the MEPS Data

Center including an application, please go to the following web address:  
<http://meps.ahrq.gov/datacenter.htm>

The steps used to calculate the BMI for children are as follows:

1. Construct and top-code child height and weight variables HGTFT42, HGTIN42, WGTLB42 and WGTOZ42 based on collected data
2. Create a preliminary data set containing height, weight, sex and age data for children 3 – 17 years old
3. Generate a preliminary child BMI for children 3 – 17 years old using the preliminary data set and the procedure for calculating the BMI for children as described on the Centers for Disease Control and Prevention (<http://www.cdc.gov/>) web site
4. Create the child BMI variable CHBMIX42 using the preliminary child BMI, setting all deceased persons and all persons over 17 years old and all persons 2 years old or younger to Inapplicable (-1)
5. Top- and bottom-code CHBMIX42 for confidentiality

As indicated in step 1 above, child height and weight were top-coded prior to the construction of the preliminary data set. The top-code value for child height for FY 2001 is 6'5". Cases where child height in feet was greater than 6 (HGTFT42 > 6) and height in inches was missing (HGTIN42 in (-7, -8, -9)) were top-coded to 6'5". For cases where height in feet was 6 (HGTFT42 = 6) and height in inches was missing (HGTIN42 in (-7, -8, -9)), the top-code value for height in inches (5 inches) was assigned to HGTIN42 for use in the calculation of the child BMI. Where height in feet was between 1 and 5 and height in inches was missing, the mid-point value for height in inches (6 inches) was assigned to HGTIN42 for use in the calculation of the child BMI. Where height in feet was 0 and height in inches was missing, the preliminary child BMI was set to "Not Ascertained" (-9).

The top-code value for child weight for FY 2001 is 260 pounds. For cases where weight in pounds was between 0 and 20 and weight in ounces was missing (WGTOZ42 in (-7,-8,-9)), the mid-point value for weight in ounces (8 ounces) was assigned to WGTOZ42 for use in the calculation of the child BMI.

This use of the mid-points for inches and ounces ensures that children who have feet but not inches in height and/or pounds but not ounces in weight are included in the BMI calculation.

As indicated in step 2 above, after top-coding child height and weight, a preliminary

SAS data set containing height, weight, sex and age data for children 3 – 17 years old in FY 2001 was created. Two SAS programs were downloaded from the Centers for Disease Control and Prevention web site for the purpose of calculating the BMI for children (step 3). These programs used the preliminary data set of children to generate a preliminary child BMI based on the 2000 CDC growth charts (<http://www.cdc.gov/growthcharts/>). These programs used the following formula to calculate the preliminary BMI for children:

$$\text{Weight in Kilograms} / [(\text{Height in Centimeters}/100)]^2$$

Note that weight in pounds and ounces was converted to weight in kilograms in the preliminary data set. Similarly, height in feet and inches was converted to height in centimeters in the preliminary data set.

As indicated in step 4 above, the child BMI variable CHBMIX42 was calculated using this preliminary BMI from step 3. Deceased persons, persons > 17 years old, and children younger than 3 years old were set to Inapplicable (-1) for CHBMIX42. Children 3 – 17 years old with a missing value for height in feet (HGTFT42 is “Refused” (-7), “Don’t Know” (-8), or “Not Ascertained” (-9)) and/or weight in pounds (WGTLB42 is “Refused” (-7), “Don’t Know” (-8), or “Not Ascertained” (-9)) were set to Not Ascertained (-9) for CHBMIX42. Children whose height in feet was 0 and height in inches was missing (HGTIN42 is “Refused” (-7), “Don’t Know” (-8), or “Not Ascertained” (-9)) were set to “Not Ascertained” (-9) for CHBMIX42. All other children 3 – 17 years old have a calculated BMI for FY 2001.

The top 1% of values for CHBMIX42 for children 3 – 17 years old (excluding cases where CHBMIX42 is Inapplicable (-1) or Not Ascertained (-9)) were top-coded at the 1% value (step 5). For FY 2001, this value is 39.2. The bottom 1% of values for CHBMIX42 for children 3 – 17 years old (excluding cases where CHBMIX42 was Inapplicable (-1) or Not Ascertained (-9)) were bottom-coded at the 1% value, 10.6.

#### **2.5.10.7 Preventive Care Variables**

For each person, excluding deceased persons, a series of questions was asked primarily about the receipt of preventive care or screening examinations. Questions varied in the applicable age or gender subgroups to which they pertained. The list of variables in this series, along with their applicable subgroup is as follows:

DENTCK53 -	on average, frequency of dental check-up All ages; both genders
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CHOLCK53 -	about how long since last blood cholesterol check by doctor or health professional Age >17; both genders
CHECK53 -	how long since last routine check-up by doctor or other health professional for assessing overall health Age >17; both genders
FLUSHT53 -	how long since last flu shot Age >17; both genders
LSTETH53 -	has person lost all natural (permanent) teeth Age >17; both genders
PSA53 -	how long since last prostate specific antigen (PSA) test Age >39; males only
HYSTER53 -	had a hysterectomy Age >17; females only
PAPSMR53 -	how long since last pap smear test Age >17; females only
BRSTEX53 -	how long since last breast exam Age >17; females only
MAMOGR53 -	how long since last mammogram Age >29; females only
STOOL53 -	ever had a blood stool test performed at home that was provided by doctor or other health professional to determine whether stool contains blood Age >17; both genders
WHENST53 - home kit	when was last time had blood stool test using  Age >17; STOOL53=1 (yes, person had a blood stool test performed at home that was provided by doctor or other health professional to determine whether stool contains blood)
BOWEL53 -	ever had sigmoidoscopy or colonoscopy Age >17; both genders

WHNBWL53 - sigmoidoscopy or	when was last sigmoidoscopy or colonoscopy Age >17; BOWEL53=1 (yes, person had colonoscopy)
PHYACT53 - vigorous week	currently spends half hour or more in moderate to physical activity at least three times a  Age>17; both genders
BMINDEX53 -	Adult Body Mass Index (BMI) as based on reported height and weight Age > 17; both genders
SEATBE53 -	wears seat belt when drives or rides in a car Age >15; both genders

For each of the variables above, a code of “Inapplicable” (-1) was assigned if the person was deceased or if the person did not belong to the applicable subgroups.

Due to confidentiality concerns and restrictions, the variables HGHTFT53, HGHTIN53, WEIGHT53 and WGTEST53, which were included on the 2000 Full-Year Consolidated Data file, will not be included on the 2001 Full-Year Consolidated Data file. Instead, a Body Mass Index (BMI) variable, BMINDEX53, was calculated for adults 18 years of age or older. This variable is included in the 2001 file and on the above list. Please note: analysts can have access to the height and weight variables and/or construct a BMI variable of their own through the MEPS Data Center. To access information on the MEPS Data Center including an application, please go to the following web address:  
<http://meps.ahrq.gov/datacenter.htm>

The following formula used to calculate the BMI for adults was taken from the Centers for Disease Control and Prevention (<http://www.cdc.gov/>) web site:

$$\text{BMI} = [\text{Weight in Pounds} / (\text{Height in Inches})^2] * 703$$

The steps used to calculate the BMI for adults are as follows:

1. Construct and top- and bottom-code code adult height, weight and weight estimate variables HGHTFT53, HGHTIN53, WEIGHT53 and WGTEST53
2. Create the building block variable ADHGHTIN, indicating total height in inches for adults => 18 years old



3. Create the temporary variable MIDWGT, indicating the mid-point value of a person's estimate of weight (WGTEST53)
4. Create the adult BMI variable BMINDEX53 using the building block and the temporary variable, setting all deceased persons and all persons < 18 years old to Inapplicable (-1)
5. Top- and bottom-code code BMINDEX53

As indicated in step 1 above, adult height and weight were top- and bottom-coded prior to the construction of the building block variable ADHGTIN (total adult height in inches) and the temporary variable MIDWGT (mid-point value of person's estimate of weight). The top-code value for adult height for FY 2001 is 6'8". The bottom-code value for adult height for FY 2001 is 4'0". Cases where adult height in feet was greater than 6 (HGHTFT53 > 6) and height in inches was missing (HGHTIN53 in (-7, -8, -9)) were top-coded to 6'8". The top-code value for adult weight for FY 2001 is 400 pounds. The bottom-code value for adult weight for FY 2001 is 80 pounds. Where estimate of weight was '79 pounds or less' (WGTEST53 = 1), estimate of weight was set to '2' (80 – 99 pounds).

The building block variable ADHGTIN was calculated as  $[(HGHTFT53 * 12) + (HGHTIN53)]$  to indicate total adult height in inches, step 2. Note that ADHGTIN was created for programming efficiency only and is not included in this data release. For cases where height in feet was 6 (HGHTFT53 = 6) and height in inches was missing (HGHTIN53 in (-7, -8, -9)), the mid-point value for height in inches (6 inches) was used in the calculation of total height in inches  $[ADHGTIN = (HGHTFT53 * 12) + 6]$ . This use of the mid-point for inches ensures that adults who have feet but not inches in height are included in the BMI calculation. ADHGTIN was set to Not Ascertained (-9) for all cases where adult height in feet was Refused, Don't Know, or Not Ascertained (HGHTFT53 in (-7, -8, -9)). Deceased persons and persons whose age was less than 18 years old were set to Inapplicable (-1) for ADHGTIN.

The temporary variable MIDWGT was calculated to indicate the mid-point value of person's estimate of weight (WGTEST53), step 3. Due to the FY 2001 top-code value for adult weight, the value 400, rather than a mid-point, was assigned to MIDWGT where estimate of weight was '400 pounds or more' (WGTEST53 = 18). Note that MIDWGT was created for programming efficiency only and is not included in this data release.

The adult BMI variable BMINDEX53 was calculated (step 4) using the building block variable ADHGTIN and adult weight in pounds (WEIGHT53) as follows:

$$BMINDEX53 = [WEIGHT53 / (ADHGTIN)^2] * 703$$

For adults whose weight in pounds was Don't Know (WEIGHT53 = -8) and whose estimate of weight was > 0 (WGTEST53 between 2 and 18), MIDWGT was used in the calculation of BMINDX53:

$$\text{BMINDX53} = [\text{MIDWGT} / (\text{ADHGTIN})^2] * 703$$

BMINDX53 was set to Not Ascertained (-9) for adults whose weight in pounds was Refused or Not Ascertained (WEIGHT53 in (-7, -9)). BMINDX53 was set to Not Ascertained (-9) for adults whose weight in pounds was Don't Know (-8) and whose estimate of weight was Refused, Don't Know, or Not Ascertained (WGTEST53 in (-7, -8, -9)). BMINDX53 was set to Not Ascertained (-9) for adults whose total height in inches was Not Ascertained (ADHGTIN = -9). Deceased persons and persons whose age was less than 18 years old were set to Inapplicable (-1) for BMINDX53.

The top 0.5% of values for BMINDX53 (excluding cases where BMINDX53 was Inapplicable (-1) or Not Ascertained (-9)) were top-coded (step 5) at the 0.5% value, 49.1. The bottom 0.5% of values for BMINDX53 (excluding cases where BMINDX53 was Inapplicable (-1) or Not Ascertained (-9)) were bottom-coded at the 0.5% value, 17.0.

#### **2.5.10.8 Priority Conditions**

For each person, excluding deceased persons, questions from the supplemental Priority Condition (PC) section were asked about the existence of select priority conditions. Questions varied in the applicable age subgroups to which they pertained.

Note that beginning in 2001, a new step has been added to each of the age-dependent PC variables such that if edited age is within range for the variable to be set, but the source data are missing because person's age in CAPI is not within range, the constructed variable is set to "Not Ascertained" (-9).

Questions were asked regarding the following conditions:

- Sore Throat – added in calendar year 2001
- Diabetes
- Asthma
- High blood pressure
- Heart disease (including coronary heart disease, angina, myocardial infarction)
- Stroke
- Emphysema

- Joint pain
- Arthritis

These conditions were selected because (1) they are relatively prevalent and (2) generally accepted standards for appropriate clinical care have been developed. As part of AHRQ's focus on the quality of health care, this series of questions obtained information on the receipt of tests or procedures appropriate for each condition. This information thus supplements other information on medical conditions that is gathered in other parts of the interview.

Editing of these variables focused on checking that skip patterns were consistent.

**Sore Throat.** Questions about sore throats were asked only of persons under age 18. Consequently, persons 18 years of age or older were coded as "Inapplicable" (-1) on these questions. SRTHRT53 indicates whether each person had a sore throat serious enough to cause the person to call a doctor or other health professional during the last 12 months. Those who said "Yes" (1) to SRTHRT53, were asked whether the person who contacted a doctor or other health professional in the last 12 months did so primarily due to a sore throat or some other symptoms (THSYMP53). For those who said "Sore Throat" (1) to THSYMP53, a follow-up question was asked which indicates whether the person actually saw the doctor or other health professional for the sore throat (DRTHRT53). THANTB53 indicates whether the doctor or other health provider prescribed antibiotics for the sore throat. Those who said "Yes" (1) to THANTB53, were asked whether the person received a throat swab before receiving the antibiotics (THSWAB53). For those who answered "No" (2), "Refused" (-7), or "Don't Know" (-8), a follow-up question, THSYMF53, was asked which indicates whether other persons in the household had similar symptoms around the same time. If THSYMF53 was answered "Yes" (1), the person was asked whether a doctor or other health professional gave these family members a throat swab (THSWBF53) and whether a doctor or health professional prescribed antibiotics for these family members (THANTF53).

**Diabetes.** DIABDX53 indicates whether each person had ever been diagnosed with diabetes (excluding gestational diabetes). Each person who said they had received a diagnosis of diabetes was asked to complete a special self-administered questionnaire. The documentation for this questionnaire appears in the Diabetes Care Survey (DCS) section of the documentation.

**Asthma.** ASTHDX53 indicates whether a respondent had ever been diagnosed with asthma. Those who said "Yes" were asked additional questions. ASATAK53 asked whether the person had experienced an episode of asthma in the past 12 months. ASFLOW53 indicates whether the person with asthma had a peak flow meter at home. ASMED53 indicates if the person with asthma took any

prescription medications. For those who said “Yes” to ASMED53, a follow-up question, ASSTER53, indicates if the person used steroid inhalers. Those who said “No” (2) (or “Refused” (-7) or “Don’t Know” (-8)) to ASTHDX53 were not asked ASATAK53, ASFLOW53, ASMED53, and ASSTER53; these respondents have been assigned a code of “Inapplicable” (-1) for these variables.

**High Blood Pressure.** Questions about high blood pressure (hypertension) were asked only of respondents aged 18 or older. Consequently, persons aged 17 or younger were coded as “Inapplicable” (-1) on these variables. HIBPDX53 ascertained whether the person had ever been diagnosed as having high blood pressure (other than during pregnancy). Those who had received this diagnosis were also asked if they had been told on two or more different visits that they had high blood pressure (BPMLDX53).

All respondents older than 17 (regardless of hypertension diagnosis) were also asked how long it had been since they had their blood pressure checked by a doctor, nurse, or other health professional (BPCHEK53). If the response was within the past year or two years, the number of months since the last blood pressure check was ascertained (BPMONT53). If the response to BPCHEK53 was longer than 2 years, BPMONT53 was not asked and was coded as “Inapplicable” (-1).

**Heart Disease.** The next series of questions concerned ischemic heart disease. The questions were asked only of respondents aged 18 or older. Consequently, persons aged 17 or younger were coded as “Inapplicable” (-1) on all the variables in this set.

- CHDDX53 - asked if the person had ever been diagnosed as having coronary heart disease
- ANGIDX53 - asked if the person had ever been diagnosed as having angina, or angina pectoris
- MIDX53 - asked if the person had ever been diagnosed as having a heart attack, or myocardial infarction
- OHRTDX53 - asked if the person had ever been diagnosed with any other kind of heart disease or condition
- STRKDX53 - asked if the person had ever been diagnosed as having had a stroke or transient ischemic attack (TIA or ministroke)

If a person said “Yes” to any of the five conditions above, follow-up questions asked if a doctor or other health professional had ever advised the person to eat fewer high fat or high cholesterol foods (NOFAT53), and if a doctor had advised the person to exercise more (EXRCIS53). A third question (ASPRIN53) asked if the person with a heart-related condition took aspirin frequently. If the person said “No”,

or if the response was “Refused” (-7), “Don’t Know” (-8), or “Not Ascertained” (-9), a follow-up question asked if the person had a health problem that made taking aspirin unsafe (NOASPR53). If the answer to NOASPR53 was “Yes” (1), the person was asked if this problem was stomach-related or something else (STOMCH53).

Those who answered “No” to NOASPR53 were coded as “Inapplicable” (-1) for STOMCH53. Those who answered “Yes” to ASPRIN53 were coded as “Inapplicable” (-1) on NOASPR53 and on STOMCH53. Finally, those who had none of the five heart-related conditions listed above (or who had missing data for all five of these questions) were coded as “Inapplicable” (-1) for NOFAT53, EXRCIS53, ASPRIN53, NOASPR53, and STOMCH53.

**Emphysema.** EMPHDX53 asked if the person (aged 18 or older) had ever been diagnosed with emphysema.

**Joint Pain.** JTPAIN53 asked if the person (aged 18 or older) had experienced pain, swelling, or stiffness around a joint in the last 12 months. This question is not intended to be used as an indicator of a diagnosis of arthritis.

**Arthritis.** ARTHDX53 asked if the person (age 18 or older) had ever been diagnosed with arthritis. If the person said “Yes” (1) to ARTHDX53, a follow-up question, ARTHTX53, was asked which indicates whether the person is currently being treated for arthritis.

#### **2.5.10.9 2001 Self-Administered Questionnaire (SAQ)**

The 2001 Self-Administered Questionnaire (SAQ), a paper-and-pencil questionnaire, was fielded during Panel 5 Round 4 and Panel 6 Round 2 of the 2001 Medical Expenditure Panel Survey (MEPS). The SAQ was designed to collect a variety of health status and health care quality measures from adults. All adults age 18 and older as of the Round 2 or 4 interview date ( $AGE42X \geq 18$ ) in MEPS households were asked to complete a SAQ. The questionnaires were administered in late 2001 and early 2002, and were administered in both English and Spanish. The variable SVERLANG can be used to identify which version of the questionnaire was administered. The variables created from the SAQ begin with ‘AD’.

Although respondents were asked to complete the SAQ themselves, some questionnaires were completed by a proxy. The variable ADPRX42 indicates the relationship between the person who completed the SAQ and the intended recipient. If  $ADPRX42 = 0$ , the SAQ was self-completed.

For the SAQ variables, a code of -1 (inapplicable) was assigned if a person was deceased, was not 18 years of age as of the interview date, was not eligible for the SAQ, was not assigned a positive SAQ weight, or was not in applicable subgroups defined below. When a gate question answer was = 2 (no), follow-up variables based on the gate question were coded as -1 (inapplicable). When a gate question answer was -7 (refused), -8 (don't know), or -9 (not ascertained), follow-up variable answers were left as reported.

A special weight variable (SAQWT01F) has been designed to be used with the SAQ for persons who were age 18 and older at the interview date. This weight adjusts for SAQ non-response and weights to the US civilian noninstitutionalized population (see Section 3.0 of the documentation for details).

### **Health Care Quality -- CAHPS®**

The health care quality measures in the SAQ were taken from the health plan version of CAHPS, an AHRQ-sponsored family of survey instruments designed to measure quality of care from the consumer's perspective. All of the variables refer to events experienced in the last 12 months and were asked of adults age 18 and older. The variables included from the CAHPS are:

ADRTCR42	Any appointment was made to see a doctor or other health provider for regular or routine health care
ADRTWW42	If ADRTCR42=1 (yes), how often got an appointment for regular or routine health care as soon as wanted
ADILCR42	Had an illness or injury needing care right away from doctor's office, clinic or emergency room
ADILWW42	If ADILCR42=1 (yes), how often got appointment for an illness or injury as soon as wanted
ADAPPT42	Number of times went to doctor's office or clinic to get care
ADNECR42	If ADAPPT42>0, how much of a problem it was to get care you or a doctor believed necessary
ADLIST42	If ADAPPT42>0, how often health providers listened carefully to you
ADEXPL42	If ADAPPT42>0, how often health providers explained things so you understood
ADRESP42	If ADAPPT42>0, how often providers showed respect for what you had to say

- ADPRTM42 If ADAPPT42>0, how often health providers spent enough time with you
- ADHECR42 If ADAPPT42>0, rating of healthcare from all doctors and other health providers, from 0 (worst health care possible) to 10 (best health care possible)

### General Health

- ADDRBP42 Blood pressure has been checked by a doctor, nurse, or other health professional
- ADSMOK42 Currently smoke
- ADDSMK42 If ADSMOK42=1 (yes), doctor advised you to quit smoking
- ADSPEC42 Needed to see a specialist
- ADPRRE42 If ADSPEC42=1 (yes), how much of a problem it was to see a specialist

### Health Status

The SAQ contained two measures of health status, the Short-Form 12 (SF-12 (r), a registered trademark) and the EuroQol 5-D (EQ-5D). These are two of the more widely used measures of health status. Key references for these two measures are:

1. Ware, J.E., Kosinski, M., and Keller, S.D. (1996). A 12-item short-form health survey: Construction of scales and preliminary tests of reliability and validity. Medical Care 34:220.
2. Brooks, R. (1996). EuroQol: The current state of play. Health Policy 37:53-72.
3. Dolan, P. (1997). Modeling variations for EuroQol health states. Medical Care 35:1095-1108.

**Short-Form 12 (SF-12).** Version 1 of the SF-12 ® was used in the 2001 SAQ. (SF-12 ® Health Survey © 1994, 2000 QualityMetric Incorporated – All rights reserved. SF-12 ® is a registered trademark of the Medical Outcomes Trust.) The SF-12 questions are as follows:

- ADGENH42 General health today
- ADDAYA42 During a typical day, limitations in moderate activities

ADCLIM42	During a typical day, limitations in climbing several flights of stairs
ADPACC42	During past 4 weeks, as result of physical health, accomplished less than would like
ADPLMT42	During past 4 weeks, as result of physical health, limited in kind of work or other activities
ADMACC4 2	During past 4 weeks, as result of mental problems, accomplished less than you would like
ADMLMT42	During past 4 weeks, as result of mental problems, limited in kind of work or other activities
ADPAIN42	During past 4 weeks, pain interfered with normal work outside the home and housework
ADCALM42	During the past 4 weeks, felt calm and peaceful
ADPEP42	During the past 4 weeks, had a lot of energy
ADBLUE42	During the past 4 weeks, felt downhearted and blue
ADSOCA42	During the past 4 weeks, physical health or emotional problems interfered with social activities

The variable ADSOCA42 was collected at Q28 in the SAQ (“During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?”). Note that there was inadvertently a difference in the response categories between the English and Spanish versions of the questionnaire for Q28. The Spanish response categories included the category 3 (Good bit of the time). Categories 3 and 4 from the Spanish version of the questionnaire were combined into category 3 (Some of the time) in the variable ADSOCA42. The remaining response categories from the Spanish version of the questionnaire were realigned to match those from the English version in the variable ADSOCA42.

In analyzing data from the SF-12, the standard approach is to form two summary scores, based on responses to these questions. The underlying conception is that overall health is composed of a physical and a mental component. The Physical Component Summary (PCS) weights more heavily responses to SF-12 items 2-5 and 8 above. The Mental Component Summary (MCS) weights more heavily responses to SF-12 items 6,7, 9 and 11 above. The other items have roughly equal weights for physical and mental components. The algorithm for computing the PCS and the MCS summary scores is described in the manual for the SF-12:



Ware, Jr., J.E., Kosinski, M., and Keller, S. How to Score the SF-12 (r) Physical and Mental Health Summary Scales (Third Edition). (September 1998). QualityMetric, Inc., Lincoln, RI.

This manual can be purchased from QualityMetric, Inc. ([www.qualitymetric.com](http://www.qualitymetric.com)).

This file contains the PCS-12 and MCS-12 summary scores for the SF-12, computed in accordance with the algorithm outlined in the manual. The PCS-12 score is PCS42, and the MCS-12 score is MCS42.

The PCS and MCS cannot be computed directly if a person has missing data for any of the twelve items. QualityMetric has developed a proprietary method for imputing the PCS and MCS scores if some data are missing. QualityMetric conducted imputations of the PCS-12 and MCS-12 scores for respondents with missing data on one or more SF-12 items. The variables PCS42 and MCS42 include cases in which the scores were imputed. SFFLAG42 indicates whether the physical component summary, PCS42, and the mental component, MCS42, were imputed for a respondent.

### **EuroQoI (EQ-5D)**

The EQ-5D contains five questions, asking about the extent of problems in mobility (ADMOBI42), self-care (ADSELF42), daily activities (ADACTI42), pain (ADPAYN42), and anxiety/depression (ADDEPR42). Each question has three possible responses: no problem, mild problem, or severe problem.

ADMOBI42 Problems with mobility

ADSELF42 Problems with self-care

ADACTI42 Problems with usual activities

ADPAYN42 Problems with pain/discomfort

ADDEPR42 Problems with anxiety/depression

ADSCAL42 Scale: Rating of your own health today

The combination of responses to the first five questions defines a “health state.” Prior research (Dolan, 1997) has developed a method for assigning a number to each health state that represents an average preference for one state versus another. The most highly-valued state (perfect health) has a score of 1.0; death has a score of 0.0; and all other health states have a score in between, with higher numbers indicating that a state is valued more highly. (Some health states actually receive a negative number, indicating that death is preferable to being in that state.)

In addition, the EQ-5D includes a sixth question (ADSCAL42), which asks respondents to rate their current overall health on a scale that ranges from 0 through 100, where 0 means “worst possible health” and 100 means “best possible health.” Thus, the EQ-5D produces two scores: the preference-based index and the rating scale.

Directions for computing the preference-based index from the five EuroQol items appear in Dolan (1997). The variable EQU42 is the preference-based index, computed according to the formula in Dolan (1997). Persons who were ineligible for the SAQ or who did not have a positive weight have been assigned scores of -1 for this variable; persons who had missing responses on any of the five component items were assigned scores of -9.

### **Attitudes about Health**

The SAQ included four questions that ascertain certain health-related attitudes. Two items (ADINSA42 and ADINSB42) deal with attitudes toward health insurance. The other two questions (ADRISK42 and ADOVER42) deal with attitudes that might influence decisions to purchase health insurance or to use health services. These items were used in the 1987 National Medical Expenditure Survey. No editing has been performed for these items.

ADINSA42    Do not need health insurance

ADINSB42    Health insurance is not worth the money it costs

ADRISK42    Am more likely to take risks than the average person

ADOVER42    Can overcome illness without help from a medically trained person

Please note that the weighted frequencies displayed in the HC-060 codebook for the health status variables collected in the SAQ and DCS (as designated in the variable labels) are based on the full-year 2001 person weight PERWT01F. However, when using these variables in analysis, weights specific to each of these sets of questions should be used (SAQWT01F, DIABW01F). For persons who are not assigned a positive SAQ weight, the SAQ variables are recoded to “Inapplicable” (-1). Please see section 3.0. “Survey Sample Information” for details.

#### **2.5.10.10 Diabetes Care Survey (DCS)**

The Diabetes Care Survey (DCS), a self-administered paper-and-pencil questionnaire, was fielded during Panel 5, Round 5 and Panel 6, Round 3. Households received a DCS based on their response to DIABDX53 in the Priority

Condition section of the CAPI instrument, which asks whether or not the respondent was ever told by a doctor or health professional that he/she had diabetes. The DCS asks the same question with responses summarized in the variable DSDIA53, and confirms that the respondent has ever been told by a health professional that he/she had diabetes or sugar diabetes. For a small number of cases DIABDX53 = YES (1) but DSDIA53 = NO (2). These people do not have a positive DCS weight. The DCS data are unedited, and, therefore, these and other data inconsistencies remain in the data. For all persons 17 years of age or younger, all the DCS variables are set to “Inapplicable” (-1) because there is not an appropriate weight included on the file to make national estimates for this population. DSA1C53 and DSCKFT53 indicate the number of times the respondent reported having a hemoglobin A-one-C test and his/her feet checked for sores or irritations in 2001, respectively. DSEYE53 indicates the last time respondents reported having an eye exam. DSKIDN53 and DSEYPR53 ascertain whether or not the diabetes has caused kidney or eye problems, respectively. DSDIET53, DSMED53 and DSINSU53 indicate if the respondent reported being treated for his/her diabetes by the following methods: diet, oral medications or insulin, respectively. If a respondent was unable to respond to the DCS, the questionnaire was completed by a proxy (DSPRX53 = 1). A special weight variable (DIABW01F) has been designed to be used with DCS data. This weight adjusts for DCS nonresponse and weights to the number of diabetics in the US civilian noninstitutionalized population in 2001 (see Section C-3.3 for details).

Please note that the weighted frequencies displayed in the HC-055 codebook for the health status variables collected in the SAQ and DCS (as designated in the variable labels) are based on the full-year 2001 person weight PERWT01F. However, when using these variables in analysis, weights specific to each of these sets of questions should be used (SAQWT01F, DIABW01F). For persons who are not assigned a positive DCS weight, the DCS variables are recoded to “Inapplicable” (-1). Please see section “3.0. Survey Sample Information” for details.

#### **2.5.11 Utilization, Expenditures and Source of Payment Variables (TOTTCH01-RXOSR01)**

The MEPS Household Component (HC) collects data in each round on use and expenditures for office and hospital-based care, home health care, dental services, vision aids, and prescribed medicines. Data were collected for each sample person at the event level (e.g., doctor visit, hospital stay) and summed across rounds 3-5 for Panel 5 (excluding 2000 events covered in Round 3) and across rounds 1-3 for Panel 6 (excluding 2002 events covered in Round 3) to produce the annual utilization and expenditure data for 2001. In addition, the MEPS Medical Provider Component (MPC) is a follow-back survey that collected data from a sample of medical providers and pharmacies that were used by sample persons in 2000.

Expenditure data collected in the MPC are generally regarded as more accurate than information collected in the HC and were used to improve the overall quality of MEPS expenditure data in this file (see below for description of methodology used to develop expenditure data).

This file contains utilization and expenditure variables for several categories of health care services. In general, there is one utilization variable (based on HC responses only), 13 expenditure variables (derived from both HC and MPC responses), and 1 charge variable for each category of health care service. The utilization variable is typically a count of the number of medical events reported for the category. The 13 expenditure variables consist of an aggregate total payments variable, 10 main component source of payment category variables, and 2 additional source of payment category variables (see below for description of source of payment categories). Expenditure variables for all categories of health care combined are also provided.

The table in Appendix 3 provides an overview of the utilization and expenditure variables included in this file. For each health service category, the table lists the corresponding utilization variable(s) and provides a general key to the expenditure variable names (13 per service category). The first 3 characters of the expenditure variable names reflect the service category (except only 2 characters for prescription medicines) while the subsequent 3 characters (\*\*\*) in table) reflect the naming convention for the source of payment categories described below (except only 2 characters for Veterans Administration). The last 2 positions of all utilization and expenditure variable names reflect the survey year (i.e., 01). More details are provided on the utilization and expenditure variables in sections 2.5.11.1 and 2.5.11.2 below.

### **2.5.11.1 Expenditures Definition**

Expenditures on this file refer to what is paid for health care services. More specifically, expenditures in MEPS are defined as the sum of direct payments for care provided during the year, including out-of-pocket payments and payments by private insurance, Medicaid, Medicare, and other sources. Payments for over the counter drugs and for alternative care services are not included in MEPS total expenditures. Indirect payments not related to specific medical events, such as Medicaid Disproportionate Share and Medicare Direct Medical Education subsidies, are also not included.

The definition of expenditures used in MEPS is somewhat different from the 1987 NMES and 1987 NMCES surveys where charges rather than sum of payments were used to measure expenditures. This change was adopted because charges became a less appropriate proxy for medical expenditures during the 1990's due to

the increasingly common practice of discounting charges. Another change from the two prior surveys is that charges associated with uncollected liability, bad debt, and charitable care (unless provided by a public clinic or hospital) are not counted as expenditures because there are no payments associated with those classifications.

While the concept of expenditures in MEPS has been operationalized as payments for health care services, variables reflecting charges for services received are also provided on the file (see below). Analysts should use caution when working with the charge variables because they do not typically represent actual dollars exchanged for services or the resource costs of those services.

### **Data Sources on Expenditures**

The expenditure data included on this file were derived from the MEPS Household and Medical Provider Components. Only HC data were collected for nonphysician visits, dental and vision services, other medical equipment and services, and home health care not provided by an agency while data on expenditures for care provided by home health agencies were only collected in the MPC. In addition to HC data, MPC data were collected for some office-based visits to physicians (or medical providers supervised by physicians), hospital-based events (e.g., inpatient stays, emergency room visits, and outpatient department visits), and prescribed medicines. For these types of events, MPC data were used if complete; otherwise HC data were used if complete. Missing data for events where HC data were not complete and MPC data were not collected or complete were derived through an imputation process (see below).

A series of logical edits were applied to both the HC and MPC data to correct for several problems including, but not limited to, outliers, copayments or charges reported as total payments, and reimbursed amounts that were reported as out of pocket payments. In addition, edits were implemented to correct for misclassifications between Medicare and Medicaid and between Medicare HMO's and private HMO's as payment sources. Data were not edited to insure complete consistency between the health insurance and source of payment variables on the file.

### **Imputation for Missing Expenditures and Data Adjustments**

Expenditure data were imputed to 1) replace missing data, 2) provide estimates for care delivered under capitated reimbursement arrangements, and 3) to adjust household reported insurance payments because respondents were often unaware that their insurer paid a discounted amount to the provider. This section contains a general description of the approaches used for these three situations. A more detailed description of the editing and imputation procedures is provided in the

documentation for the MEPS event level files.

Missing data on expenditures were imputed using a weighted sequential hot-deck procedure for most medical visits and services. In general, this procedure imputes data from events with complete information to events with missing information but similar characteristics. For each event type, selected predictor variables with known values (e.g., total charge, demographic characteristics, region, provider type, and characteristics of the event of care, such as whether it involved surgery) were used to form groups of donor events with known data on expenditures, as well as identical groups of recipient events with missing data. Within such groups, data were assigned from donors to recipients, taking into account the weights associated with the MEPS complex survey design. Only MPC data were used as donors for hospital-based events while data from both the HC and MPC were used as donors for office-based physician visits. The general approach that was used to impute missing expenditure data on prescribed medicines is described in section 2.5.11.2 below.

Because payments for medical care provided under capitated reimbursement arrangements and through public clinics and Veterans' Hospitals are not tied to particular medical events, expenditures for events covered under those types of arrangements and settings were also imputed. Events covered under capitated arrangements were imputed from events covered under managed care arrangements that were paid based on a discounted fee-for-service method, while imputations for visits to public clinics and Veterans' Hospitals were based on similar events that were paid on a fee-for-service basis. As for other events, selected predictor variables were used to form groups of donor and recipient events for the imputations.

An adjustment was also applied to some HC reported expenditure data because an evaluation of matched HC/MPC data showed that respondents who reported that charges and payments were equal were often unaware that insurance payments for the care had been based on a discounted charge. To compensate for this systematic reporting error, a weighted sequential hot-deck imputation procedure was implemented to determine an adjustment factor for HC reported insurance payments when charges and payments were reported to be equal. As for the other imputations, selected predictor variables were used to form groups of donor and recipient events for the imputation process.

### **Methodology for Flat Fee Expenditures**

Most of the expenditures for medical care reported by MEPS participants are associated with single medical events. However, in some situations there is one charge that covers multiple contacts between a medical provider and patient (e.g.

obstetrician services, orthodontia). In these situations (generally called flat or global fees), total payments for the flat or global fee were included if the initial service was provided in 2001. For example, all payments for an orthodontist's fee that covered multiple visits over three years were included if the initial visit occurred in 2001. However, if a visit in 2001 to an orthodontist was part of a flat fee in which the initial visit occurred in 1999, then none of the payments for the flat fee were included.

The approach used to count expenditures for flat fees may create what appear to be inconsistencies between utilization and expenditure variables. For example, if several visits under a flat fee arrangement occurred in 2001 but the first visit occurred in 1999, then none of the expenditures were included, resulting in low expenditures relative to utilization for that person. Conversely, the flat fee methodology may result in high expenditures for some persons relative to their utilization. For example, all of the expenditures for an expensive flat fee were included even if only the first visit covered by the fee had occurred in 2001. On average, the methodology used for flat fees should result in a balance between overestimation and underestimation of expenditures in a particular year.

### **Zero Expenditures**

There are some medical events reported by respondents where the payments were zero. This could occur for several reasons including (1) free care was provided, (2) bad debt was incurred, (3) care was covered under a flat fee arrangement beginning in an earlier year, or (4) follow-up visits were provided without a separate charge (e.g. after a surgical procedure). In summary, these types of events have no impact on the person level expenditure variables contained in this file.

### **Source of Payment Categories**

In addition to total expenditures, variables are provided which itemize expenditures according to the major source of payment categories. These categories are:

1. Out of pocket by user or family (SLF);
2. Medicare (MCR);
3. Medicaid (MCD);
4. Private Insurance (PRV);
5. Veterans' Administration, excluding CHAMPVA (VA);
6. Tricare (TRI);
7. Other Federal Sources--includes Indian Health Service, Military Treatment Facilities, and other care provided by the Federal government (OFD);
8. Other State and Local Source--includes community and neighborhood clinics, State and local health departments, and State programs other than Medicaid (STL);

- 9. Worker's Compensation (WCP);
- 10. Other Unclassified Sources--includes sources such as automobile, homeowner's, liability, and other miscellaneous or unknown sources (OSR).

Two additional source of payment variables were created to classify payments for particular persons that appear inconsistent due to differences between the survey questions on health insurance coverage and sources of payment for medical events. These variables include:

- 11. Other Private (OPR) - any type of private insurance payments reported for persons not reported to have any private health insurance coverage during the year as defined in MEPS (i.e. for hospital and physician services); and
- 12. Other Public (OPU) - Medicaid payments reported for persons who were not reported to be enrolled in the Medicaid program at any time during the year.

Though relatively small in magnitude, users should exercise caution when interpreting the expenditures associated with the OPR and OPU categories. While these payments stem from apparent inconsistent responses to the health insurance and source of payment questions in the survey, some of these inconsistencies may have logical explanations. For example, private insurance coverage in MEPS is defined as having a major medical plan covering hospital and physician services. If a MEPS sample person did not have such coverage but had a single service type insurance plan (e.g. dental insurance) that paid for a particular episode of care, those payments may be classified as "other private". Some of the "other public" payments may stem from confusion between Medicaid and other state and local programs or may be for persons who were not enrolled in Medicaid, but were presumed eligible by a provider who ultimately received payments from the program.

Please note, unlike the other events, the prescribed medicine events do have some remaining inconsistent responses between the insurance section of the HC and sources of payment from the PC (more specifically, discrepancies between Medicare only Household insurance responses and Medicaid sources of payment provided by pharmacy providers). These inconsistencies remain unedited because there was strong evidence from the PC that these were indeed Medicaid payments. All of these types of HC events were exact matches to events in the PC, and in addition, all of these types of events were purchases by persons with positive weights.

The naming conventions used for the source of payment expenditure variables are shown in parentheses in the list of categories above and in the key to the attached table in Appendix 3. In addition, total expenditure variables (EXP in key) based on



the sum of the 12 source of payment variables above are provided.

## **Charge Variables**

In addition to the expenditure variables described above, a variable reflecting total charges is provided for each type of service category (except prescribed medicines). This variable represents the sum of all fully established charges for care received and usually does not reflect actual payments made for services, which can be substantially lower due to factors such as negotiated discounts, bad debt, and free care (see above). The naming convention used for the charge variables (TCH) is also included in the key to the attached table in Appendix 3. The total charge variable across services (TOTTCH01) excludes prescribed medicines.

### **2.5.11.2 Utilization and Expenditure Variables by Type of Medical Service**

The following sections summarize definitional, conceptual and analytic considerations when using the utilization and expenditure variables in this file. Separate discussions are provided for each MEPS medical service category.

#### **Medical Provider Visits (i.e., Office-Based Visits)**

Medical provider visits consist of encounters that took place primarily in office-based settings and clinics. Care provided in other settings such as a hospital, nursing home, or a person's home are not included in this category.

The total number of office based visits reported for 2001 (OBTOTV01) as well as the number of such visits to physicians (OBDRV01) and nonphysician providers (OBOTHV01) are contained in this file. For a small proportion of sample persons, the sum of the physician and nonphysician visit variables (OBDRV01+OBOTHV01) is less than the total number of office-based visits variable (OBTOTV01) because OBTOTV01 contains reported visits where the respondent did not know the type of provider.

Non-physician visits (OBOTHV01) include visits to the following types of providers: chiropractors, midwives, nurses and nurse practitioners, optometrists, podiatrists, physician's assistants, physical therapists, occupational therapists, psychologists, social workers, technicians, receptionists/clerks/secretaries, or other medical providers. Separate utilization variables are included for selected types of more commonly seen non-physician providers including chiropractors (OBCHIR01), nurses/nurse practitioners (OBNURS01), optometrists (OBOPTO01), physician assistants (OBASST01), and physical or occupational therapists (OBTHER01).

Expenditure variables associated with all medical provider visits, physician visits,

and non-physician visits in office-based settings can be identified using the attached table in Appendix 3. As for the corresponding utilization variables, the sum of the physician and non-physician visit expenditure variables (e.g. OBDEXP01+OBOEXP01) is less than the total office-based expenditure variable (OBVEXP01) for a small proportion of sample persons. This can occur because OBVEXP01 includes visits where the respondent did not know the type of provider seen.

## **Hospital Events**

Separate utilization variables for hospital care are provided for each type of setting (inpatient, outpatient department, and emergency room) along with two expense variables per setting; one for basic hospital facility expenses and another for payments to physicians who billed separately for services provided at the hospital. These payments are referred to as “separately billing doctor” or SBD expenses.

Hospital facility expenses include all expenses for direct hospital care, including room and board, diagnostic and laboratory work, x-rays, and similar charges, as well as any physician services included in the hospital charge. Separately billing doctor (SBD) expenses typically cover services provided to patients in hospital settings by providers like radiologists, anesthesiologists, and pathologists, whose charges are often not included in hospital bills.

## **Hospital Outpatient Visits**

Variables for the total number of reported visits to hospital outpatient departments in 2001 (OPTOTV01) as well as the number of outpatient department visits to physicians (OPDRV01) and non-physician providers (OPOTHV01) are contained in this file. For a small proportion of sample persons, the sum of the physician and non-physician visit variables (OPDRV01+OPOTHV01) is less than the total number of outpatient visits variable (OPTOTV01) because OPTOTV01 contains reported visits where the respondent did not provide information on the type of provider seen.

Expenditure variables (both facility and SBD) associated with all medical provider visits, physician visits, and non-physician visits in outpatient departments can be identified using the attached table in Appendix 3. As for the corresponding utilization variables, the sum of the physician and non-physician expenditure variables (e.g., OPVEXP01+OPOEXP01 for facility expenses) is less than the variable for total outpatient department expenditures (OPFEXP01) for a small proportion of sample persons. This can occur because OBFEXP01 includes visits where the respondent did not know the type of provider seen. No expenditure variables are provided for health care consultations that occurred over the telephone.

## **Hospital Emergency Room Visits**

The variable ERTOT01 represents a count of all emergency room visits reported for the survey year. Expenditure variables associated with ERTOT01 are identified in the attached table in Appendix 3. It should be noted that hospitals usually include expenses associated with emergency room visits that immediately result in an inpatient stay with the charges and payments for the inpatient stay. Therefore, to avoid the potential for double counting when imputing missing expenses, separately reported facility expenditures for emergency room visits that were identified in the MPC as directly linked to an inpatient stay were included as part of the inpatient stay only (see below). This strategy to avoid double counting resulted in \$0 facility expenditures for these emergency room visits. However, these \$0 emergency room visits are still counted as separate visits in the utilization variable ERTOT01.

## **Hospital Inpatient Stays**

Two measures of total inpatient utilization are provided on the file: (1) total number of hospital discharges (IPDIS01) and (2) the total number of nights associated with these discharges (IPNGTD01). Please note that the variable IPNGTD01 is an imputed version of the IPNGT01 variable released earlier on HC-055. For the 61 cases that were missing length of stay information, data were imputed using a weighted sequential hot-deck procedure. IPDIS01 includes hospital stays where the dates of admission and discharge were reported as identical. These “zero night stays” can be included or excluded from inpatient analyses at the user’s discretion (see last paragraph of this section).

Expenditure variables associated with hospital inpatient stays are identified in the attached table in Appendix 3. To the extent possible, payments associated with emergency room visits that immediately preceded an inpatient stay are included with the inpatient expenditures (see above) and payments associated with healthy newborns are included with expenditures for the mother (see next paragraph for more detail).

Data used to construct the inpatient utilization and expenditure variables for newborns were edited to exclude stays where the newborn left the hospital on the same day as the mother. This edit was applied because discharges for infants without complications after birth were not consistently reported in the survey and charges for newborns without complications are typically included in the mother’s hospital bill. However, if the newborn was discharged at a later date than the mother was discharged, then the discharge was considered a separate stay for the newborn when constructing the utilization and expenditure variables.

Some analysts may prefer to exclude zero night stays from inpatient analyses and/or count these stays as ambulatory visits. Therefore, a separate use variable is provided which contains a count of the number of inpatient events where the reported dates of admission and discharge were the same (IPZERO01). This variable can be subtracted from IPDIS01 to exclude zero night stays from inpatient utilization estimates. In addition, separate expenditure variables are provided for zero night facility expenses (ZIFEXP01) and for separately billing doctor expenses (ZIDEXP01). Analysts who choose to exclude zero-night stays from inpatient expenditure analyses need to subtract the zero-night expenditure variable from the corresponding expenditure variable for total inpatient stays (e.g. IPFEXP01-ZIFEXP01 for facility expenses, IPDEXP01-ZIDEXP01 for separately billing doctor expenses).

## **Dental Visits**

The total number of dental visits variable (DVTOT01) includes those to any person(s) for dental care including general dentists, dental hygienists, dental technicians, dental surgeons, orthodontists, endodontists, and periodontists. Additional variables are provided for the numbers of dental visits to general dentists (DVGEN01) and to orthodontists (DVORTH01). For a small proportion of sample persons, the sum of the general dentist and orthodontist visit variables (DVGEN01+DVORTH01) is greater than the total number of dental visits (DVTOT01). This result can only occur for persons who were reported to have seen both a general dentist and orthodontist in the same visit(s). When this occurred, expenditures for the visit were included as orthodontist expenses but not as general dentist expenses. Expenditure variables for all three categories of dental providers can be identified using the attached table in Appendix 3.

## **Home Health Care**

In contrast to other types of medical events where data were collected on a per visit basis, information on home health care utilization is collected in MEPS on a per month basis. Variables are provided which indicate the total number of days in 2001 where home health care was received by the following: from any type of paid or unpaid caregiver (HHTOTD01), from agencies, hospitals, or nursing homes (HHAGD01), from self-employed persons (HHINDD01), and from unpaid informal caregivers not living with the sample person (HHINFD01). The number of provider days represents the sum across months of the number of days on which home health care was received, with days summed across all providers seen. For example, if a person received care in one month from one provider on 2 different days, then the number of provider days would equal 2. The number of provider days would also equal 2 if a person received care from 2 different providers on the same day. However, if a person received care from 1 provider 2 times in the same day,

then the provider days would equal 1. These variables were assigned missing values if the number of provider days could not be computed for any month in which the specific type of home health care was received.

Separate expenditure variables are provided for agency-sponsored home health care (includes care provided by home health agencies, hospitals, and nursing homes) and care provided by self-employed persons. The attached table in Appendix 3 identifies the home health care utilization and expenditure variables contained in the file.

### **Vision Aids**

Expenditure variables for the purchase of glasses and/or contact lenses are identified in the attached table in Appendix 3. Due to the data collection methodology, it was not possible to determine whether vision items that were reported in round 3 had been purchased in 1999 or 2001. Therefore, expenses reported in round 3 were only included if more than half of the person's reference period for the round was in 2001.

### **Other Medical Equipment and Services**

This category includes expenditures for ambulance services, orthopedic items, hearing devices, prostheses, bathroom aids, medical equipment, disposable supplies, alterations/modifications, and other miscellaneous items or services that were obtained, purchased or rented during the year. On this file diabetic supplies and insulin are not considered to be medical equipment. All use and expenditure information for these items are included in the prescribed medicine variables. Respondents were only asked once (in round 3) about their total annual expenditures and were not asked about their frequency of use of these services. Expenditure variables representing the combined expenses for these supplies and services are identified in the Appendix 3 table.

### **Prescribed Medicines**

There is one total utilization variable (RXTOT01) and 13 expenditure variables included on the 2001 full-year file relating to prescribed medicines. These 13 expenditure variables include an annual total expenditure variable (RXEXP01) and 12 corresponding annual source of payment variables (RXSLF01, RXMCR01, RXMCD01, RXPRV01, RXVA01, RXTRI01, RXOFD01, RXSTL01, RXWCP01, RXOSR01, RXOPR01, and RXOPU01). The total utilization variable is a count of all prescribed medications initially purchased during 2001, as well as any additional acquisitions of the medication. The total expenditure variable sums all amounts paid out-of-pocket and by third party payers for each prescription purchased in 2001. No

variables reflecting charges for prescription medicines are included because a large proportion of respondents to the pharmacy component survey did not provide charge data (see below).

### **Prescribed Medicines Data Collected**

Data regarding prescription drugs were obtained through the household questionnaire and a pharmacy component survey. During each round of the MEPS HC, all respondents were asked to supply the name of any prescribed medication they or their family members purchased or otherwise obtained during that round. For each medication and in each round, the following information was collected: whether any free samples of the medication were received; the name(s) of any health problems the medication was prescribed for; the number of times the prescription drug was obtained or purchased; the year, month, and day on which the person first used the medication; and a list of the names, addresses, and types of pharmacies that filled the household's prescriptions. Also, during the Household Component, respondents were asked if they send in claim forms for their prescriptions (self-filers) or if their pharmacy providers do this automatically for them at the point of purchase (non-self-filers). For non-self-filers, charge and payment information was collected in the pharmacy component survey, unless the purchase was an insulin or diabetic supply/equipment event. However, charge and payment information was collected for self-filers in the household questionnaire, because payments by private third party payers for self-filers' purchases would not be available from the pharmacy component. Uninsured persons were treated as those whose pharmacies filed their prescription claims at the point of purchase. Persons who said they did not know if they sent in their own prescription claim forms were treated as those who did send in their own prescription claim forms.

Pharmacy providers identified by the household were contacted by telephone for the pharmacy component if permission was obtained in writing from the person with the prescription to release their pharmacy records. The signed permission forms were provided to the various establishments prior to making any requests for information. Each establishment was informed of all persons participating in the survey that had prescriptions filled there in 2001 and a computerized printout containing information about these prescriptions was sought. For each medication listed, the following information was requested: date filled; national drug code (NDC); medication name; strength of medicine (amount and unit); quantity (package size and amount dispensed); total charge; and payments by source.

When diabetic supplies, such as syringes and insulin, were reported in the other medical supply section of the MEPS HC questionnaire as having been obtained during the round, the interviewer was directed to collect information on these items in the prescription drug section of MEPS. Charge and payment information was

asked for these events.

## **Prescribed Medicines Data Editing and Imputation**

The general approach to preparing the household prescription data for this file was to utilize the pharmacy component prescription data to assign expenditure values to the household drug mentions. For events that charge and payment data were collected from the household in the HC, information on payment sources was retained to the extent that these data were reported. A matching program was adopted to link pharmacy component drugs and the corresponding drug information to household drug mentions. To improve the quality of these matches, all drugs on the household and pharmacy files were coded based on the medication names provided by the household and pharmacy, and when available, the national drug code (NDC) provided in the pharmacy survey. Considerable editing was done prior to the matching to correct data inconsistencies in both data sets and fill in missing data and correct outliers on the pharmacy file.

Drug price per unit outliers were analyzed on the pharmacy file by first identifying the average wholesale unit price (AWUP) of the drug by linkage through the NDC to a proprietary data base. In general, prescription drug unit prices were deemed to be outliers by comparing unit prices reported in the pharmacy data base to the AWUP and were edited, as necessary.

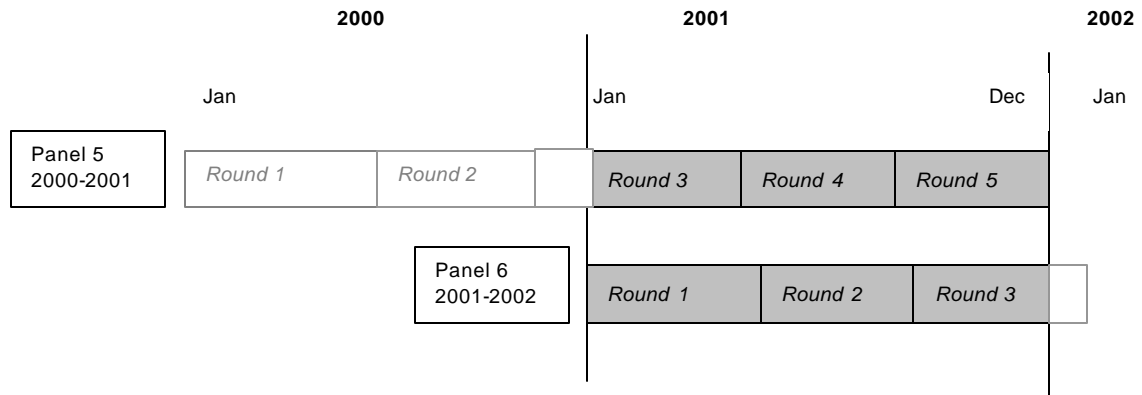
For those rounds that spanned two years, drugs mentioned in that round were allocated between the years based on the number of times the respondent said the drug was purchased in the respective year, the year the person started taking the drug, the length of the person's round, the dates of the person's round, and the number of drugs for that person in the round. In addition, a "folded" version of the PC on an event level, as opposed to an acquisition level, was used for these types of events to assist in determining how many acquisitions of the drug should be allocated between the years.

## **3.0 Survey Sample Information**

### **3.1 Sample Design and Response Rates**

The MEPS is designed to produce estimates at the national and regional level over time for the civilian, noninstitutionalized population of the United States and some subpopulations of interest. The data in this public use set pertain to calendar year 2001. The data were collected in Rounds 1, 2, and 3 for MEPS Panel 6 and Rounds 3, 4, and 5 for MEPS Panel 5. (Note that Round 3 for a MEPS panel is designed to overlap two calendar years.) Variables convey the same information for this full year file that has been provided for the full year files associated with years 1996 – 2000

of MEPS. The only utilization data that appear on the file are those associated with health care events occurring in calendar year 2001. All such utilization data for 2001 reported by MEPS respondents regardless of round and panel have been included in this database.



## References

There have been some published reports on the MEPS sample design. For detailed information on the MEPS sample design for Panel 1, see Cohen, S. Sample Design of the 1996 Medical Expenditure Panel Survey Household Component. Rockville (MD): Agency for Health Care Policy and Research; 1997. MEPS Methodology Report, No. 2. AHCPR Pub. No. 97-0027. For detailed information on the MEPS sample design for Panel 2, see Cohen, S., Sample Design of the 1997 Medical Expenditure Panel Survey Household Component. Rockville (MD): Agency for Healthcare Research and Quality; 2000. MEPS Methodology Report, No. 11. AHRQ Pub No. 01-0001.

## MEPS-Linked to the National Health Interview Survey

The households in this 2001 MEPS database are related to households participating in the National Health Interview Survey in 1999 and 2000. The households (occupied DUs) selected for MEPS Panel 5 were a subsample of the 1999 National Health Interview Survey (NHIS) responding households while those in MEPS Panel 6 were a subsample of 2000 NHIS respondents. A household may contain one or more family units, each consisting of one or more individuals. Analysis can be undertaken using either the individual or the family as the unit of analysis.

There were 5,380 households (occupied DUs) selected for inclusion in MEPS Panel 5, of which 5,357 were eligible for fielding (college dormitories were eliminated). They were selected as a nationally representative subsample of the households responding to the 1999 NHIS. A subsample of 10,704 households was



selected for MEPS Panel 6 from among households responding to the 2000 NHIS, of which 10,651 were fielded after the elimination of college dorms.

The NHIS sample design is multi-stage and rather complicated. A brief and simplified description of the NHIS design follows. The first stage of sample selection is an area sample of PSUs, where PSUs generally consist of one or more counties. Within PSUs, density strata are formed, generally reflecting the density of minority populations for single or groups of blocks or block equivalents that are assigned to the strata. Within each such density stratum "supersegments" are formed, consisting of clusters of housing units. Samples of supersegments are selected for use over a 10-year data collection period for the NHIS. Households within supersegments are selected for each calendar year the NHIS is carried out. Households containing Hispanics and blacks are oversampled at rates of approximately 2 and 1.5 times, respectively, the rate of remaining households. These same rates of oversampling are reflected in the MEPS sample of households. The only major difference in eligibility status for housing units between NHIS and MEPS is that college dorms represent ineligible housing units for MEPS. College aged students living away from home during the school year were interviewed at their place of residence for the NHIS but were identified by and linked to their parents' household for MEPS. (There is also a person-level stage of sampling for the NHIS but that does not have a direct impact on the MEPS sample design.)

### **Sample Weights and Variance Estimation**

In the database "MEPS HC-060: 2001 Full Year Consolidated Data File," weight variables are provided for estimation purposes. The weight variables (PERWT01F, FAMWT01F, SAQWT01F and DIABW01F) provided in this file supercede the weight variables provided in the 2001 Full Year Population Characteristics File (HC-055). Procedures and considerations associated with the construction and interpretation of person and family-level estimates using these and other variables are discussed below.

### **3.1.1 The MEPS Sampling Process and Response Rates: An Overview**

Generally, about three-eighths of the NHIS responding households are made available for use in MEPS. A subsample of these households is then drawn for MEPS interviewing. Because the MEPS subsampling has to be done very soon after NHIS responding households are identified, a small percentage of the NHIS households initially characterized as NHIS respondents are later classified as nonrespondents for the purposes of NHIS data analysis. This actually serves to increase the overall MEPS response rate slightly since the percentage of NHIS households eligible for MEPS is slightly larger than the NHIS household-level response rate and some NHIS nonresponding households do participate in MEPS. However, as a result, for these NHIS nonrespondents there are no NHIS data available to incorporate into analyses with MEPS data.

Once the MEPS sample is selected from among the NHIS households characterized as NHIS respondents, RUs representing students living in student housing or consisting entirely of military personnel are dropped from the sample. For the NHIS, college students living in student housing are sampled independently from their families. For MEPS, such students are identified through the sample selection of their parents' RU. Removing from MEPS those college students found in college housing sampled for the NHIS eliminates the opportunity of multiple chances of selection for MEPS for these students. Military personnel not living in the same RU as civilians are ineligible for MEPS. After such exclusions, all RUs associated with households selected from among those identified as NHIS responding households are then fielded in the first round of MEPS.

Table 3.1 shows these three informational components just discussed in Rows A, B, and C. Row A indicates the percentage of NHIS households eligible for MEPS. Row B indicates the number of NHIS households sampled for MEPS. Row C indicates the number of sampled households actually fielded for MEPS (after dropping the students and military members discussed above).

Table 3.1 Response rates for Full Year file (Panel 6 Rounds 1-3/Panel 5, Rounds 3-5)

		Panel 6	Panel 5	2001 Combine d
A.	Percentage of NHIS sample eligible for MEPS	89.88%	92.16%	
B.	Number of households sampled from the NHIS	10,704	5,380	
C.	Number of Households sampled from the NHIS and fielded for MEPS	10,651	5,357	
D.	Round 1 – Number of RUs eligible for interviewing	11,556	5,750	
E.	Round 1 – Number of RUs with completed interviews	9,377	4,670	
F.	Round 2 – Number of RUs eligible for interviewing	9,666	4,774	
G.	Round 2 – Number of RUs with completed interviews	9,222	4,510	
H.	Round 3 – Number of RUs eligible for interviewing	9,380	4,597	
I.	Round 3 – Number of RUs with completed interviews	9,001	4,437	
J.	Round 4 – Number of RUs eligible for interviewing		4,522	
K.	Round 4 – Number of RUs with completed interviews		4,396	
L.	Round 5 – Number of RUs eligible for interviewing		4,420	
M.	Round 5 – Number of RUs with completed interviews		4,357	
Overall response rates through the Spring of 2002				
P6: $A \times (E/D) \times (G/F) \times (I/H)$		66.8%		
P5: $A \times (E/D) \times (G/F) \times (I/H) \times (K/J) \times (M/L)$		(Panel 6 through Round 3)	65.4% (Panel 5 through Round 5)	
Combined: $(2/3) \times P6 + (1/3) \times P5$				66.3%

## Response Rates

In order to produce annual health care estimates for calendar year 2001 based on the full MEPS sample, data are pooled across the fifth and sixth MEPS national samples. More specifically, full calendar year 2001 data collected in Rounds 3 through 5 for the MEPS Panel 5 sample are pooled with data from the first three rounds of data collection for the MEPS Panel 6 sample (the general approach is illustrated below). Overall, the full 2001 MEPS sample consists of 12,852 participating RUs (where student RUs are linked to parent RUs for this count). There are 32,122 responding individuals that completed the full series of MEPS interviews

for their entire period of eligibility, providing the necessary information to produce national use estimates for calendar year 2001. (Note that some of the 32,122 responding individuals belong to nonresponding families, since a family is deemed to have responded to MEPS only if all of its key, inscope members over the course of the year responded to the MEPS. For example, if a parent RU responded to MEPS but an associated student RU, such as a son away at college, failed to respond in any round of data collection, the family would be considered nonrespondent for this full year database. However, all key, inscope members of the parent RU would receive person-level weights. Specifically, there were 732 persons with a person weight but no family weight.)

When an RU is visited for a round of data collection, changes in RU membership are identified. Such changes include RU members who have moved to another location in the U.S., thus creating a new RU to be interviewed for MEPS, as well as student RUs. Thus, the number of RUs eligible for MEPS interviewing in a given round can only be determined after data collection is fully completed. The ratio of the number of RUs completing the MEPS interview in a given round to the number of RUs characterized as eligible to complete the interview for that round represents the "conditional" response rate for that round. It is "conditional" in that it pertains to the set of RUs characterized as eligible for MEPS for that round, and thus is "conditioned" on prior participation rather than representing the overall response rate through that round. For example, in Table 3.1, for Panel 5, Round 2 the ratio of 4,510 (Row G) to 4,774 (Row F) multiplied by 100 represents the percentage response rate for the round (94.5 percent when computed), conditioned on the set of RUs characterized as eligible for MEPS for that round. Taking the product of the percentage of the NHIS sample eligible for MEPS (row A) with the product of the ratios for a consecutive set of MEPS rounds beginning with round one produces the overall response rate through the last MEPS round specified.

The overall response rate for the combined sample of Panels 5 and 6 for 2001 has been obtained by computing the products of the relative sample sizes and the corresponding overall panel response rates and then summing the two products. Panel 6 represents about two-thirds of the combined sample size while Panel 5 represents the remaining third. Thus, the combined response rate is (2/3) times the overall Panel 6 response rate through Round 3 plus one-third times the overall Panel 5 response rate through Round 5.

Note that there has been mention made of oversampling rates. In a sample where all persons in a population are selected with the same probability, the sample distribution is expected to be proportionate to the population distribution. For example, if Hispanics represent 15 percent of the general population, one would expect roughly 15 percent of the persons sampled to be Hispanic. However, in order to improve the precision of estimates for subgroups of a population, one

might decide to select samples from those subgroups at higher rates than the remainder of the population. Thus, one might select Hispanics at twice the rate (i.e., at double the probability) of persons not oversampled. Thus, subgroups that are "oversampled" are represented at disproportionately high rates in the sample. The sample weights then are used so that population estimates account for this disproportionate contribution from oversampled subgroups, as the base sample weights for oversampled groups will be smaller than for the portion of the population not oversampled. If a subgroup is sampled at roughly twice the rate of sample selection for the remainder of the population not oversampled, members of the subgroup will receive base or initial sample weights (prior to nonresponse or poststratification adjustments) that are roughly half the size of the group "not oversampled"

### **3.1.2 Panel 6**

For MEPS Panel 6, Round 1 10,651 households were fielded in 2001 (row C of Table 3.1), a nationally representative subsample of the households responding to the 2000 National Health Interview Survey (NHIS). Similar to the earlier MEPS panels, the Panel 6 sample reflects the oversampling of Hispanic and black households resulting from the NHIS sample design. Hispanic households were oversampled at a rate of roughly 2 to 1. That is, the probability of selecting a Hispanic household for participation in the NHIS was roughly twice that for households in the general population that were not oversampled. The oversampling rate for black households was roughly 1.5 to 1. Oversampling a subgroup is done to improve the precision of survey estimates for that particular subgroup. The "cost" of oversampling is that the precision of estimates for the general population will be reduced to some extent compared to the precision one could achieve for the general population if the same overall sample size were selected but no oversampling was undertaken.

Table 3.1 shows the number of RUs eligible for interviewing in each Round of Panel 6 as well as the number of RUs completing the MEPS interview. Computing the individual Round "conditional" Response Rates as described in section 3.1.1 and then taking the product of the resulting three "conditional" round response rates and the factor 89.88 (the percentage of the NHIS sampled households eligible for MEPS) yields an overall response rate of 66.8 percent for Panel 6 through Round 3.

Of the 21,824 Panel 6 full year MEPS respondents with person-level weights for calendar year 2001, 21,568 were inscope on December 31, 2001.

### **3.1.3 Panel 5**

For MEPS Panel 5, 5,357 households were fielded in 2000 (as indicated in Row C of Table 3.1), a nationally representative subsample of the households responding to the 1999 National Health Interview Survey (NHIS). As with Panel 6, Panel 5 reflects the oversampling of Hispanic and blacks undertaken for the NHIS.

Table 3.1 shows the number of RUs eligible for interviewing and the number completing the interview for all five rounds of Panel 5. The overall response rate for Panel 5 has been computed in a similar fashion to that of Panel 6 but covering all five rounds of MEPS interviewing as well the factor representing the percentage of NHIS sampled households eligible for MEPS. The overall response rate for Panel 5 through Round 5 is 65.4 percent.

Of the 10,298 Panel 5 full year MEPS respondents with person-level weights for calendar year 2001, 10,177 were inscope on December 31, 2001

### **3.1.4 Combined Panel Response**

A combined response rate for the survey respondents in this data set is obtained by taking a weighted average of the panel specific response rates. The Panel 5 response rate was weighted by a factor of one-third while that of Panel 6 by a factor of two-thirds, reflecting approximately the distribution of the sample sizes between the two panels. The resulting combined response rate for the combined panels is  $((1/3) \times 65.4) + ((2/3) \times 66.8)$  or 66.3 percent (as shown in Table 3.1). There were 32,122 person-level survey participants.

## **3.2 Person-level Estimation Using This MEPS Public Use Release**

### **Overview**

There is a single person-level weight variable called PERWT01F. However, care should be taken in its application as it permits both “point-in-time” and “range of time” estimates, depending on the variables used to define the set of persons of interest for analysis. A person-level weight was assigned to each key, inscope person who responded to MEPS for the full period of time that he or she was inscope during the MEPS. For Panel 6 this requirement pertained only to 2001, but for Panel 5 it pertained to both 2000 and 2001. (Recall that a person is inscope whenever he or she is a member of the civilian, noninstitutionalized portion of the U.S. population.)

### **Developing Person-level MEPS Estimates**

The data in this file can be used to develop estimates on persons in the civilian, noninstitutionalized population on December 31, 2001 and for the slightly larger

population of persons in the civilian, noninstitutionalized population at any time during 2001. To obtain a cross-sectional (point-in-time) estimate for all inscope persons living in the country on December 31, 2001, include cases with both PERWT01F>0 (a positive person-level weight) and INSC1231=1 (the person is inscope on December 31, 2001). To obtain an estimate for all persons who were inscope at some time in 2001, include all cases with PERWT01F>0. After selecting the appropriate cases, apply the weight variable PERWT01F to the analytic variable(s) of interest to obtain national estimates. Table 3.2 contains a summary of cases to include and sample sizes for these two populations.

Table 3.2 Summary of Included Cases and Sample Sizes

Population of Interest	Cases to Include	Sample Size
Civilian, Noninstitutionalized Population on December 31, 2001	PERWT01F>0 and INSC1231=1	31,745
Civilian, Noninstitutionalized Population over the course of 2001	PERWT01F>0	32,122

## Details on Person-Level Weights Construction

### Overview

The person-level weight PERWT01F was developed in three stages. A person-level weight for Panel 6 was created, including both an adjustment for nonresponse over time and poststratification, controlling to Current Population Survey (CPS) population estimates based on six different variables (race/ethnicity, sex, age, poverty status, region, MSA). Then a person-level weight for Panel 5 was created, again including an adjustment for nonresponse over time and poststratification, controlling to CPS population estimates based on the same six variables. A composite weight was formed from the Panel 5 and Panel 6 weights by multiplying the Panel weights by factors corresponding to the relative sample size of the two panels. Then a final poststratification was done on this composite weight variable, again based on the same six poststratification variables used previously.

### MEPS Panel 5

The person-level weight for MEPS Panel 5 was developed using the 2000 full year weight for an individual as a “base” weight for survey participants present in 2000. For key, inscope respondents who joined an RU some time in 2001 after being out-of-scope in 2000, the “base” weight was taken to be the 2000 family weight associated with the family the person joined. The weighting process included an adjustment for nonresponse over Rounds 4 and 5 as well as poststratification to population control totals for December, 2001 for key, responding persons inscope on December 31, 2001. These control totals were derived by scaling back the population distribution obtained from the March 2002 CPS to reflect the December, 2001 estimated population distribution, employing age and sex data available from the December, 2001 CPS. Variables used in the establishment of person-level poststratification control figures included: census region (Northeast, Midwest, South, West); MSA status (MSA, non-MSA); race/ethnicity (Hispanic, black but non-Hispanic, and other); sex, and age. Key responding persons not inscope on



December 31, 2001 but inscope earlier in the year retained, as their final Panel 5 weight, the weight after the nonresponse adjustment.

## **MEPS Panel 6**

The person-level weight for MEPS Panel 6 was developed using the MEPS Round 1 person-level weight as a “base” weight. For key, inscope respondents who joined an RU after Round 1, the Round 1 family weight served as a “base” weight. The weighting process included an adjustment for nonresponse over the remaining data collection rounds in 2001 as well as poststratification to the same population control figures for December 2001 used for the MEPS Panel 5 weights for key, responding persons inscope on December 31, 2001. The same five variables employed for Panel 5 poststratification (census region, MSA status, race/ethnicity, sex, and age) were used for Panel 6 poststratification. As with Panel 5, Panel 6 key, responding persons not inscope on December 31, 2001 but inscope earlier in the year retained the weight after nonresponse adjustment as their final Panel 6 weight.

Note that the MEPS Round 1 weights for both panels incorporated the following components: the original household probability of selection for the NHIS; ratio-adjustment to NHIS-based national population estimates at the household (occupied DU) level; adjustment for nonresponse at the DU-level for Round 1; and poststratification to figures at the family and person level obtained from the corresponding March CPS data bases.

### **The Final Weight for 2001**

Variables used in the establishment of person-level poststratification to control totals derived from CPS data included: census region (Northeast, Midwest, South, West); MSA status (MSA, non-MSA); race/ethnicity (Hispanic, black but non-Hispanic, and other); sex, and age. Persons included in this poststratification were those inscope on December 31, 2001. In addition, the weights of some persons out-of-scope on December 31, 2001 were also poststratified. Specifically, the weights of persons out-of-scope on December 31, 2001 that were inscope some time during the year and also entered a nursing home during the year were poststratified to a corresponding control total obtained from the 1996 MEPS Nursing Home Component. The weights of persons who died while inscope during 2001 were poststratified to corresponding estimates derived using data obtained from the Medicare Current Beneficiary Survey (MCBS) and Vital Statistics information provided by the National Center for Health Statistics (NCHS). Separate control totals were developed for the “65 and older” and “under 65” civilian, noninstitutionalized populations.

Overall, the weighted population estimate for the civilian, noninstitutionalized population for December 31, 2001 is 280,791,812 (PERWT01F>0 and INSC1231=1). The inclusion of key, inscope persons who were not inscope on December 31, 2001 brings the estimated total number of persons represented by

the MEPS respondents over the course of the year to 284,247,327 (PERWT01F>0).

It may be noted that, if one were to compare the MEPS estimates for the civilian, noninstitutionalized population for 2001 to those from previous years, there would appear to be a sizeable increase in 2001. In previous years the percentage increase has been slightly under one percent while between the 2000 and 2001 MEPS population estimates it is roughly two percent. This is due to the fact that CPS control figures are used for poststratification of the weights, and the MEPS full year 2001 file is the first that incorporates CPS figures that reflect 2000 Census figures instead of projections from figures obtained from the 1990 Census. The projections were somewhat low compared to 2000 Census figures. Some subgroups were particularly affected. For example, the new CPS figures provide population estimates for Hispanics that are roughly 8 percent higher than previous projections suggested.

Table 3.3 Persons with a person weight for the 2001 Full Year file

	Panel 5	Panel 6	Combined	Population estimate (weighted total of combined sample)
Number	10,298	21,824	32,122	284,247,327

### Coverage

The target population associated with this MEPS database is the 2001 U.S. civilian, noninstitutionalized population. However, the MEPS sampled households are a subsample of the NHIS households interviewed in 1999 (Panel 5) and 2000 (Panel 6). New households created after the NHIS interviews for the respective Panels and consisting exclusively of persons who entered the target population after 1999 (Panel 5) or after 2000 (Panel 6) are not covered by MEPS. Neither are previously out-of-scope persons who join an existing household but are unrelated to the current household residents. Persons not covered by a given MEPS panel thus include some members of the following groups: immigrants; persons leaving the military; U.S. citizens returning from residence in another country; and persons leaving institutions. The set of uncovered persons constitutes only a small proportion of the MEPS target population.

### 3.3 Family-level Estimation Using This MEPS Public Use Release

There is a single family weight variable called FAMWT01F provided in this release. FAMWT01F can be used to make estimates for the cross-section of families in the U.S. civilian, noninstitutionalized population on December 31, 2001 where families

are identified based on the MEPS definition of a family unit. Estimates can include MEPS families that existed at some time during 2001 but whose members became out-of-scope prior to the end of the year (e.g., all family members moved out of the country, died, etc.) as well as MEPS families in existence on December 31, 2001.

### **Definition of “Family” for Estimation Purposes**

A family in MEPS generally consists of two or more persons living together in the same household who are related by blood, marriage, or adoption, as well as foster children. (Foster children are not included as members under the CPS definition of a family.) However, MEPS also defines as a family unmarried persons living together who consider themselves a family unit (these are not families under the CPS definition.). Single persons living with neither a relative nor a person identified as a “significant other” have also been assigned a family ID value and a family-level weight, and thus can be included or excluded from family-level estimates, as desired. Relatives identified as usual residents of the household who were not present at the time of the interview, such as college students living away from their parents’ home during the school year, were considered as members of the family that identified them.

To make estimates at the family-level, it is necessary to prepare a family-level file containing one record per family (see instructions below), family-level summary characteristics, and the family-level weight variable (FAMWT01F). Each MEPS family unit is uniquely identified by the combination of the variables DUID and FAMIDYR. The number of persons in a MEPS sample family ranges from 1 to 14 (the positive values for the variable FAMSZEYR). Only persons with positive nonzero family weight values (FAMWT01F>0) are candidates for inclusion in family estimates.

Two sets of families for whom estimates can be obtained are defined in table 3.4 below (along with respective sample sizes). Persons with FMRS1231=1 were inscope for the survey on 12/31/01 and therefore part of a MEPS family on 12/31/01. The more expansive definition of families (second row in table 3.4) includes families and members of families who were not inscope at the end of the year. While MEPS includes individual persons as family units (about one-third of all units) to cover the entire civilian, noninstitutionalized population, analysts may restrict their analyses to families with two or more members using the family size variables shown in table 3.4 (for example, to limit consideration to the cross-section of families with two or more members in the civilian, noninstitutionalized population on December 31, 2001, consider only families where FAMS1231 is at least 2.)

Table 3.4 MEPS Families

Population of Interest	Cases to Include	Sample Size (Includes single person units)	Family Size Variable
Cross-section of Families in the Civilian Noninstitutionalized Population on 12/31/01	FAMWT01F>0 & FMRS1231=1	12,728	FAMS1231
Families in the Civilian Noninstitutionalized Population on 12/31/01 <u>plus</u> families and members of families in existence earlier in 2001 who were not part of the civilian noninstitutionalized population on 12/31/01	FAMWT01F>0	12,852	FAMSZEYR

### Instructions to Create Family Estimates

The following is a summary of the steps and the variables to be used for family-level estimation based on the MEPS type definition of families.

1. Concatenate the variables DUID and FAMIDYR into a new variable (e.g., DUIDFAMY).
2. To create a family-level file, sort by DUIDFAMY and then subset to one record per DUIDFAMY value by retaining only the reference person record (FAMRFPYR=1) for each value of DUIDFAMY. Some family-level measures needed for analytic purposes (e.g., means or totals) can be obtained after aggregating person-level information across all members of a family. For other types of measures, analysts frequently use the characteristics of the reference person to characterize his or her family unit (e.g., the race/ethnicity, marital status, or age of the reference person).
3. Apply the weight FAMWT01F to the analytic variable(s) of interest to obtain national family estimates.

### Details on Family Weight Construction and Estimated Number of Families

To develop the family-level weight (FAMWT01F), the person-level weight (PERWT01F) of the family reference person (FAMRFPYR=1) was used as the “base” weight for all responding full year families. Then, for responding families eligible for weighting and in existence at the end of 2001, these “base” weights were poststratified to population

control figures derived from CPS estimates for December 2001 (these figures were derived by scaling the population totals obtained from the March 2002 CPS to reflect family estimates as of December, 2001). The family-level poststratification incorporated the following variables: census region; MSA status; race/ethnicity of reference person (Hispanic, black but non Hispanic, and other); family type (reference person married, living with spouse; male reference person, unmarried or spouse not present; female reference person, unmarried or spouse not present); age of reference person; and family size as of December 31, 2001.

Overall, the weighted population estimate for the 12,728 MEPS family units containing at least one member of the U.S. civilian, noninstitutionalized population on December 31, 2001 (those families whose members have FAMWT01F>0 and FMRS1231=1) is 120,955,494. The inclusion of families whose members left the inscope population prior to December 31, 2001 brought the estimated total number of families represented by the 12,852 MEPS responding families (those families whose members have FAMWT01F>0) to 123,764,216.

Table 3.5. Families with a family weight for the 2001 Full Year file

	Panel 5	Panel 6	Combine d	Population estimate (weighted total of combined sample)
Number	4,156	8,696	12,852	122,307,199

### 3.4 Weights and Response Rates for the Self-Administered Questionnaire

For analytic purposes, a single person-level weight variable, SAQWT01F, has been provided for use with the data obtained from the Self-Administered Questionnaire (SAQ). This questionnaire was administered in Panel 6, Round 2 and Panel 5, Round 4 and was to be completed by each adult (person aged 18 or older) in the family. Thus, the target population for the SAQ is adults in the civilian, noninstitutionalized population at the time data were collected for Rounds 2/4.

The weight variable was developed by first adjusting for questionnaire non-response. Variables included in the undertaking of the nonresponse adjustment were region, MSA status, family size, marital status, level of education, health status, health insurance status, and age. Then the weights were poststratified to Current Population Survey (CPS) estimates corresponding to December 2001 (the same source of control figures used for the full year person weights). The poststratification variables were region, MSA status, age, sex, and race/ethnicity, as were used in the

poststratification of the full year person weights. The sole difference is that the age group 15-19 used for the full year weights was partitioned into two cells, 15-17 and 18-19. Only the 18-19 figures were used for poststratification purposes as only adults were of interest for the SAQ.

In all, there were 20,966 persons assigned a SAQ weight with the sum of the weights being 208,271,773 (an estimate of the adult civilian, noninstitutionalized population at the time the SAQ was administered).

The Panel 5, Round 4 response rate for the SAQ was 93.1 percent, while the Panel 6, Round 2 response rate for the SAQ was 93.2 percent. Pooled response rates for the survey respondents have been computed by taking a weighted average of the panel-specific response rates, where the weights were the relative proportion of persons with sample weights associated with each panel (about one-third associated with Panel 5, the remaining two thirds with Panel 6). The pooled response rate for the combined panels for the SAQ is 93.2 percent.

### **3.5 Weights and Response Rates for the Diabetes Care Survey**

A person-level weight, DIABW01F, was developed for use with the data obtained from the Diabetes Care Survey (DCS). This weight was assigned to each person with a SAQ weight who also was established as having diabetes through the following process (persons aged 17 or under were not considered eligible for a DCS weight).

First a knowledgeable adult family member sharing the same residence was asked to identify any family member in the residence having diabetes. Then, those identified with diabetes were asked if a doctor had ever indicated that the person had diabetes. Those who responded affirmatively to that question and who also had a SAQ weight were assigned a DCS weight.

In all, 1,329 people were assigned a DCS weight ( $DIABW01F > 0$ ). The sum of the DCS weights is 13,676,743, an estimate of the adult population with diabetes as identified by the two step process described above. This estimate can be expected to slightly understate the number of persons diagnosed with diabetes as two components of the population are excluded. These are: family members not identified by the "knowledgeable adult family member"; and persons who joined an RU in Round 3 of Panel 6 or Round 5 of Panel 5 (this latter group was not eligible for the SAQ and thus not eligible for a DCS weight).

The Panel 5, Round 5 response rate for the DCS was 87.7 percent. The Panel 6, Round 3 response rate for the DCS was 85.5 percent. The pooled response rate for the combined panels for the DCS is 86.4 percent. The pooled response rate is a

weighted average for the two panels, reflecting their relative sample sizes (roughly one-third of the respondents are from Panel 5, the remaining two-thirds from Panel 6).

### **3.6 Variance Estimation**

To obtain estimates of variability (such as the standard error of sample estimates or corresponding confidence intervals) for estimates based on MEPS survey data, the complex sample design of MEPS for both person and family-level analyses must be taken into account. Various approaches can be used to develop such estimates of variance including use of the Taylor series or replication methodologies. Replicate weights have not been developed for the MEPS 2001 data.

Using a Taylor Series approach, variance estimation strata and the variance estimation PSUs within these strata must be specified. The corresponding variables on the 2001 MEPS full year utilization data base are VARSTR01 and VARPSU01, respectively. Specifying a “with replacement” design in a computer software package, such as SUDAAN, should provide standard errors appropriate for assessing the variability of MEPS survey estimates. It should be noted that the number of degrees of freedom associated with estimates of variability indicated by such a package may not appropriately reflect the actual number available. For MEPS sample estimates for characteristics generally distributed throughout the country (and thus the sample PSUs), one can expect at least 100 degrees of freedom for the 2001 full year data associated with the corresponding estimates of variance.

### **3.7 Guidelines for which weight to use for analysis involving data/variables from multiple sources and supplements: MEPS 2001 full-year use file**

In general, the appropriate analytic weight is the one that incorporates all potential levels of nonresponse.

For analysis involving variables from the SAQ, the SAQWT01F should be used. For example, if examining access to care or quality of care variables by social-demographics, health status, or health insurance, SAQWT01F is the appropriate weight even though person level socio-demographic variables, health status, and health insurance are part of the core person level questionnaire. The exception is for analysis involving access to care or quality of care variables from the SAQ and variables from the Diabetes Care Survey where DIABW00F should be used.

For analysis of the Diabetes Care Survey variables by socio-demographic variables, health status, or health insurance (for example), DIABW01F should be used.



For all other person level analyses, those not involving variables from the SAQ or DCS, PERWT01F should be used.

For all family level analysis, FAMWT01F should be used.

#### **D. Variable-Source Crosswalk**

## SURVEY ADMINISTRATION VARIABLES - PUBLIC USE

VARIABLE	DESCRIPTION	SOURCE
DUID	Dwelling Unit ID	Assigned in Sampling
PID	Person Number	Assigned in Sampling or by CAPI
DUPERSID	Person ID (DUID+PID)	Assigned in Sampling
PANEL01	Panel Number	Constructed
FAMID31	Family ID (Student Merged In) – R3/1	CAPI Derived
FAMID42	Family ID (Student Merged In) – R4/2	CAPI Derived
FAMID53	Family ID (Student Merged In) – R5/3	CAPI Derived
FAMID01	Family ID (Student Merged In) – 12/31/01	CAPI Derived
FAMIDYR	Annual Family Identifier	Constructed
CPSFAMID	CPS-Like Family Identifier	Constructed
HIEUIDX	Health Insurance Eligibility Unit Identifier	Constructed
FCSZ1231	Family Size Responding 12/31 CPS Family	Constructed
FCRP1231	Ref Person of 12/31 CPS Family	Constructed
RULETR31	RU Letter – R3/1	CAPI Derived
RULETR42	RU Letter – R4/2	CAPI Derived
RULETR53	RU Letter – R5/3	CAPI Derived
RULETR01	RU Letter As of 12/31/01	CAPI Derived
RUSIZE31	RU Size – R3/1	CAPI Derived
RUSIZE42	RU Size – R4/2	CAPI Derived
RUSIZE53	RU Size – R5/3	CAPI Derived
RUSIZE01	RU Size As of 12/31/01	CAPI Derived
RUCLAS31	RU fielded as: Standard/New/Student – R3/1	CAPI Derived
RUCLAS42	RU fielded as: Standard/New/Student – R4/2	CAPI Derived
RUCLAS53	RU fielded as: Standard/New/Student – R5/3	CAPI Derived
RUCLAS01	RU fielded as: Standard/New/Stud-12/31/01	CAPI Derived
FAMSZE31	RU Size Including Students – R3/1	CAPI Derived
FAMSZE42	RU Size Including Students – R4/2	CAPI Derived
FAMSZE53	RU Size Including Students – R5/3	CAPI Derived
FAMSZE01	RU Size Including Students As of 12/31/01	CAPI Derived
FMRS1231	Member of Responding 12/31 Family	Constructed
FAMS1231	Family Size of Responding 12/31 Family	Constructed
FAMSZEYR	Size of Responding Annualized Family	Constructed
FAMRFPYR	Reference Person of Annualized Family	Constructed
REFPRS31	Reference Person At - R3/1	RE 42-45
REFPRS42	Reference Person At - R4/2	RE 42-45
REFPRS53	Reference Person At - R5/3	RE 42-45

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
REFPRS01	Reference Person As Of 12/31/01	RE 42-45
RESP31	1st Respondent Indicator For R3/1	RE 6, 8
RESP42	1st Respondent Indicator For R4/2	RE 6, 8
RESP53	1st Respondent Indicator For R5/3	RE 6, 8
RESP01	1st Respondent Indicator As Of 12/31/01	RE 6, 8
PROXY31	Was Respondent A Proxy In R3/1	RE 2
PROXY42	Was Respondent A Proxy In R4/2	RE 2
PROXY53	Was Respondent A Proxy In R5/3	RE 2
PROXY01	Was Respondent A Proxy As Of 12/31/01	RE 2
INTVLANG	Language in Which Interview Was Completed	Constructed
BEGRFD31	R3/1 Reference Period Begin Date: Day	CAPI Derived
BEGRFM31	R3/1 Reference Period Begin Date: Month	CAPI Derived
BEGRFY31	R3/1 Reference Period Begin Date: Year	CAPI Derived
ENDRFD31	R3/1 Reference Period End Date: Day	CAPI Derived
ENDRFM31	R3/1 Reference Period End Date: Month	CAPI Derived
ENDRFY31	R3/1 Reference Period End Date: Year	CAPI Derived
BEGRFD42	R4/2 Reference Period Begin Date: Day	CAPI Derived
BEGRFM42	R4/2 Reference Period Begin Date: Month	CAPI Derived
BEGRFY42	R4/2 Reference Period Begin Date: Year	CAPI Derived
ENDRFD42	R4/2 Reference Period End Date: Day	CAPI Derived
ENDRFM42	R4/2 Reference Period End Date: Month	CAPI Derived
ENDRFY42	R4/2 Reference Period End Date: Year	CAPI Derived
BEGRFD53	R5/3 Reference Period Begin Date: Day	CAPI Derived
BEGRFM53	R5/3 Reference Period Begin Date: Month	CAPI Derived
BEGRFY53	R5/3 Reference Period Begin Date: Year	CAPI Derived
ENDRFD53	R5/3 Reference Period End Date: Day	CAPI Derived
ENDRFM53	R5/3 Reference Period End Date: Month	CAPI Derived
ENDRFY53	R5/3 Reference Period End Date: Year	CAPI Derived
ENDRFD01	2001 Reference Period End Date: Day	RE Section
ENDRFM01	2001 Reference Period End Date: Month	RE Section
ENDRFY01	2001 Reference Period End Date: Year	RE Section
KEYNESS	Person Key Status	RE Section
INSCOP31	Inscope – R3/1	RE Section
INSCOP42	Inscope – R4/2	RE Section
INSCOP53	Inscope – R5/3	RE Section
INSCOP01	Inscope – R5/3 Start Through 12/31/01	RE Section
INSC1231	Inscope Status on 12/31/01	Constructed
INSCOPE	Was Person Ever Inscope In 2001	RE Section

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
ELGRND31	Eligibility – R3/1	RE Section
ELGRND42	Eligibility – R4/2	RE Section
ELGRND53	Eligibility – R5/3	RE Section
ELGRND01	Eligibility Status as of 12/31/01	RE Section
ELIGIBLE	Was Person Ever Eligible In 2001	RE Section
PSTATS31	Person Disposition Status – R3/1	RE Section
PSTATS42	Person Disposition Status – R4/2	RE Section
PSTATS53	Person Disposition Status – R5/3	RE Section
RURSLT31	RU Result – R3/1	Assigned by CAPI
RURSLT42	RU Result – R4/2	Assigned by CAPI
RURSLT53	RU Result – R5/3	Assigned by CAPI

### **DEMOGRAPHIC VARIABLES - PUBLIC USE**

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
REGION31	Census Region – R3/1	Assigned in Sampling
REGION42	Census Region – R4/2	Assigned in Sampling
REGION53	Census Region – R5/3	Assigned in Sampling
REGION01	Census Region As Of 12/31/01	Assigned in Sampling
MSA31	MSA Status – R3/1	Assigned in Sampling
MSA42	MSA Status – R4/2	Assigned in Sampling
MSA53	MSA Status – R5/3	Assigned in Sampling
MSA01	MSA Status As Of 12/31/01	Assigned in Sampling
AGE53X	Age – R5/3 (Edited/Imputed)	RE 12, 57-66
AGE01X	Age as of 12/31/01 (Edited/Imputed)	RE 12, 57-66
DOBMM	Date of Birth: Month	RE 12, 57-66
DOBY	Date of Birth: Year	RE 12, 57-66
SEX	Sex	RE 12, 57, 61
RACEX	Race (Edited/Imputed)	RE 101, 102
RACETHNX	Race/Ethnicity (Edited/Imputed)	RE 98-102
HISPANX	Hispanic Ethnicity (Edited/Imputed)	RE 98-100
HISPCAT	Specific Hispanic Ethnicity Group	RE 98-100
MARRY31X	Marital Status – R3/1 (Edited/Imputed)	RE 13, 97
MARRY42X	Marital Status – R4/2 (Edited/Imputed)	RE 13, 97
MARRY53X	Marital Status – R5/3 (Edited/Imputed)	RE 13, 97

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
MARRY01X	Marital Status–12/31/01 (Edited/Imputed)	RE 13, 97
SPOUID31	Spouse ID – R3/1	RE 13, 76, 77, 97
SPOUID42	Spouse ID – R4/2	RE 13, 76, 77, 97
SPOUID53	Spouse ID – R5/3	RE 13, 76, 77, 97
SPOUID01	Spouse ID – 12/31/01	RE 13, 76, 77, 97
SPOUIN31	Marital Status W/ Spouse Present – R3/1	RE 13, 76, 77, 97
SPOUIN42	Marital Status W/ Spouse Present – R4/2	RE 13, 76, 77, 97
SPOUIN53	Marital Status W/ Spouse Present – R5/3	RE 13, 76, 77, 97
SPOUIN01	Marital Status W/Spouse Present–12/31/01	RE 13, 76, 77, 97
EDUCYEAR	Years of Educ When First Entered MEPS	RE 103-105
HIDEGYR	Highest Degree When First Entered MEPS	RE 103-105
FTSTU31X	Student Status If Ages 17-23 – R3/1	RE 11A, 106-108
FTSTU42X	Student Status If Ages 17-23 – R4/2	RE 11A, 106-108
FTSTU53X	Student Status If Ages 17-23 – R5/3	RE 11A, 106-108
FTSTU01X	Student Status If Ages 17-23 – 12/31/01	RE 11A, 106-108
ACTDTY31	Military Full-Time Active Duty – R3/1	RE 14, 96A
ACTDTY42	Military Full-Time Active Duty – R4/2	RE 14, 96B1
ACTDTY53	Military Full-Time Active Duty – R5/3	RE 14, 96B1
DIDSERVE	Ever Served In Armed Forces	RE 18, 95
VETVIET	Served In Vietnam War Era	RE 35, 94, 94A, 95, 96
VETKOR	Served In Korean War Era	RE 35, 94, 94A, 95, 96
VETWW	Served In WWI Or WW2 Era	RE 35, 94, 94A, 95, 96
VETGULF	Served in Persian Gulf/Desert Storm	RE 35, 94, 94A, 95, 96
VETOTH	Served In Other Period	RE 35, 94, 94A, 95, 96
RFREL31X	Relation To Ref Pers – R3/1 (Edit/Imp)	RE 76-77
RFREL42X	Relation To Ref Pers – R4/2 (Edit/Imp)	RE 76-77
RFREL53X	Relation To Ref Pers – R5/3 (Edit/Imp)	RE 76-77
RFREL01X	Relation To Ref Pers – 12/31/01 (Edit/Imp)	RE 76-77
MOPID31X	PID of Person's Mom – RD 3/1	RE 76-77
MOPID42X	PID of Person's Mom – RD 4/2	RE 76-77
MOPID53X	PID of Person's Mom – RD 5/3	RE 76-77
DAPID31X	PID of Person's Dad – RD 3/1	RE 76-77
DAPID42X	PID of Person's Dad – RD 4/2	RE 76-77
DAPID53X	PID of Person's Dad – RD 5/3	RE 76-77

## INCOME VARIABLES

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
SSIDIS01	SSI Receipt Due To Disability	IN 39
AFDC01	Did Person's Check Include Tanf	IN 44
FILEDR01	Has Person Filed A Fed Income Tax Return	IN 02
WILFIL01	Will Person File Fed Income Tax Return	IN 03
FLSTAT01	Person's Filing Status	IN 04
FILER01	Primary Or Secondary Filer	IN 04
JTINRU01	Joint Filer's Membership In RU	IN 05
JNTPID01	PID of Joint Filer	IN 05
CLMDEP01	Did/Will Pers Claim Dependents On Return	IN 06
DEPDNT01	Person Is Flagged A Dependent	IN 07
DPINRU01	Dependents In/Out Of RU	IN 07
DPOTSD01	How Many Dependents Live Outside RU	IN 08
TAXFRM01	Tax Form Person Will File	IN 09
DEDUCT01	Itemize Or Standard Deduction	IN 10
ITMEXP01	Will Person Itemize Medical Expense	IN 11
MEXAMT01	Total Medical Expenses Deducted	IN 12
NTMDED01	Person's Net Medical Expense Deduction	IN 13
TOTDED01	Total Of All Itemized Deductions	IN 14
CLMHIP01	Did/Will Pers Deduct Health Insur Prem	IN 15
ELDISC01	Did/Will Pers Receive Elderly/Disab Cred	IN 16
EICRDT01	Did/Will Pers Receive Earned Inc Credit	IN 17
UNEMTX01	Taxable Percentage Of Unemployment	IN 30OV
INTRTX01	Taxable Percentage Of Interest	IN 19OV
SSECTX01	Taxable Percentage Of Social Security	IN 31OV
IRATAX01	Taxable Percentage Of Ira Income	IN 25OV
FOODST01	Did Anyone Purchase Food Stamps	IN 55
FOODMN01	Number Of Months Food Stamps Purchased	IN 56
FOODCT01	Monthly Amount Family Paid For Food Stamps	IN 57
FOODVL01	Monthly Value Of Food Stamps	IN 58
TTLP01X	Person's Total Income	Constructed
POVCAT01	Family Income As Percent Of Poverty Line	Constructed
WAGEP01X	Person's Wage Income	Constructed
WAGIMP01	Wage Imputation Flag	Constructed
BUSNP01X	Person's Business Income	Constructed
BUSIMP01	Business Income Imputation Flag	Constructed
FARMP01X	Person's Farm Income	Constructed
FARIMP01	Farm Income Imputation Flag	Constructed
UNEMP01X	Person's Unemployment Comp Income	Constructed
UNEIMP01	Unemployment Imputation Flag	Constructed

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
WCMPP01X	Person's Workers' Compensation	Constructed
WCPIMP01	Workers' Comp Imputation Flag	Constructed
INTRP01X	Person's Interest Income	Constructed
INTIMP01	Interest Imputation Flag	Constructed
DIVDP01X	Person's Dividend Income	Constructed
DIVIMP01	Dividend Imputation Flag	Constructed
SALEP01X	Person's Sales Income	Constructed
SALIMP01	Sales Income Imputation Flag	Constructed
PENSP01X	Person's Pension Income	Constructed
PENIMP01	Pension Income Imputation Flag	Constructed
SSECP01X	Person's Social Security Income	Constructed
SSCIMP01	Social Security Imputation Flag	Constructed
TRSTP01X	Person's Trust/Rent Income	Constructed
TRTIMP01	Trust Income Imputation Flag	Constructed
VETSP01X	Person's Veteran's Income	Constructed
VETIMP01	Veteran's Income Imputation Flag	Constructed
IRASP01X	Person's Ira Income	Constructed
IRAIMP01	Ira Income Imputation Flag	Constructed
REFDP01X	Person's Refund Income	Constructed
REFIMP01	Refund Income Imputation Flag	Constructed
ALIMP01X	Person's Alimony Income	Constructed
ALIIMP01	Alimony Income Imputation Flag	Constructed
CHLDP01X	Person's Child Support	Constructed
CHLIMP01	Child Support Imputation Flag	Constructed
CASHP01X	Person's Other Regular Cash Contrib	Constructed
CSHIMP01	Cash Contribution Imputation Flag	Constructed
SSIP01X	Person's SSI	Constructed
SSIIMP01	SSI Imputation Flag	Constructed
PUBP01X	Person's Public Assistance	Constructed
PUBIMP01	Public Assistance Imputation Flag	Constructed
OTHRP01X	Person's Other Income	Constructed
OTHIMP01	Other Income Imputation Flag	Constructed

#### **EMPLOYMENT VARIABLES - PUBLIC USE**

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
EMPST31	Employment Status Rd 3/1	EM 1-3; RJ 1, 6
EMPST42	Employment Status Rd 4/2	EM 1-3; RJ 1, 6



<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
EMPST53	Employment Status Rd 5/3	EM 1-3; RJ 1, 6
RNDFLG31	Data Collection Round for Rd 3/1 CMJ	Constructed
MORJOB31	Has More Than One Job Rd 3/1 Int Date	EM 1-4, 51; RJ 1, 6; Constructed
MORJOB42	Has More Than One Job Rd 4/2 Int Date	EM 1-4, 51; RJ 1, 6; Constructed
MORJOB53	Has More Than One Job Rd 5/3 Int Date	EM 1-4, 51; RJ 1, 6; Constructed
EVRWRK	Ever Worked For Pay in Life as of 12/31/01	EM 1-4, 51; RJ 1, 6; Constructed
HRWG31X	Hourly Wage Rd 3/1 CMJ (Imputed)	EW 5, 7, 11-13, 17-18, 24; EM 104, 111
HRWG42X	Hourly Wage Rd 4/2 CMJ (Imputed)	EW 5, 7, 11-13, 17-18, 24; EM 104, 111
HRWG53X	Hourly Wage Rd 5/3 CMJ (Imputed)	EW 5, 7, 11-13, 17-18, 24; EM 104, 111
HRWGIM31	HRWG31X Imputation Flag	Constructed
HRWGIM42	HRWG42X Imputation Flag	Constructed
HRWGIM53	HRWG53X Imputation Flag	Constructed
HRHOW31	How Hourly Wage Was Calculated R3/1	EM 2-3, 51, 104, 111; EW 2-24
HRHOW42	How Hourly Wage Was Calculated R4/2	EM 2-3, 51, 104, 111; EW 2-24
HRHOW53	How Hourly Wage Was Calculated R5/3	EM 2-3, 51, 104, 111; EW 2-24
HOUR31	Hours Per Week at RD 3/1 CMJ	EM 1-3, 51, 104-105, 111; EW 17

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
HOUR42	Hours Per Week at RD 4/2 CMJ	EM 1-3, 51, 104-105, 111; EW 17
HOUR53	Hours Per Week at RD 5/3 CMJ	EM 1-3, 51, 104-105, 111; EW 17
TEMPJB31	Is CMJ a Temporary Job RD31	EM 105C, 111C; RJ 01AA, 06A
TEMPJB42	Is CMJ a Temporary Job RD42	EM 105C, 111C; RJ 01AA, 06A
TEMPJB53	Is CMJ a Temporary Job RD53	EM 105C, 111C; RJ 01AA, 06A
SSNLJB31	Is CMJ a Seasonal Job RD31	EM 105D, 111D; RJ 01AAA, 06AA
SSNLJB42	Is CMJ a Seasonal Job RD42	EM 105D, 111D; RJ 01AAA, 06AA
SSNLJB53	Is CMJ a Seasonal Job RD53	EM 105D, 111D; RJ 01AAA, 06AA
SELFCM31	Self-Employed at RD 3/1 CMJ	EM 1-3, 51; RJ 01
SELFCM42	Self-Employed at RD 4/2 CMJ	EM 1-3, 51; RJ 01
SELFCM53	Self-Employed at RD 5/3 CMJ	EM 1-3, 51; RJ 01
DISVW31X	Disavowed Health Ins at R3/1 CMJ (Ed)	EM113, 117; RJ07, 08, 08A; HX and OE Sections
DISVW42X	Disavowed Health Ins at R4/2 CMJ (Ed)	EM113, 117; RJ07, 08, 08A; HX and OE Sections

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
DISVW53X	Disavowed Health Ins at R5/3 CMJ (Ed)	EM113, 117; RJ07, 08, 08A; HX and OE Sections
CHOIC31	Choice of Health Plans at Rd 3/1 CMJ	EM 1-3, 51, 96, 113-115, 124; RJ08
CHOIC42	Choice of Health Plans at Rd 4/2 CMJ	EM 1-3, 51, 96, 113-115, 124; RJ08
CHOIC53	Choice of Health Plans at Rd 5/3 CMJ	EM 1-3, 51, 96, 113-115, 124; RJ08
CIND31	Condensed Industry Code Rd 3/1 CMJ	EM 97-100; RJ01; Constructed
CIND42	Condensed Industry Code Rd 4/2 CMJ	EM 97-100; RJ01; Constructed
CIND53	Condensed Industry Code Rd 5/3 CMJ	EM 97-100; RJ01; Constructed
NUMEMP31	Number of Employees at Rd 3/1 CMJ	EM 91-92, 124; RJ01
NUMEMP42	Number of Employees at Rd 4/2 CMJ	EM 91-92, 124; RJ01
NUMEMP53	Number of Employees at Rd 5/3 CMJ	EM 91-92, 124; RJ01
MORE31	Rd 3/1 CMJ Firm Has More Than One Locat	EM 1-3, 51, 94; RJ01
MORE42	Rd 4/2 CMJ Firm Has More Than One Locat	EM 1-3, 51, 94; RJ01
MORE53	Rd 5/3 CMJ Firm Has More Than One Locat	EM 1-3, 51, 94; RJ01
UNION31	Union Status at Rd 3/1 CMJ	EM 1-3, 51, 96, 116; RJ01
UNION42	Union Status at Rd 4/2 CMJ	EM 1-3, 51, 96, 116; RJ01
UNION53	Union Status at Rd 5/3 CMJ	EM 1-3, 51, 96, 116; RJ01

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
NWK31	Reason Not Working During Rd 3/1	EM 1-3, 101-102, 126-127, 132-133, 138-139, 141, 141OV; RJ10
NWK42	Reason Not Working During Rd 4/2	EM 1-3, 101-102, 126-127, 132-133, 138-139, 141, 141OV; RJ10
NWK53	Reason Not Working During Rd 5/3	EM 1-3, 101-102, 126-127, 132-133, 138-139, 141, 141OV; RJ10
CHGJ3142	Changed Job Between Rd 3/1 and Rd 4/2	RJ01, 01A
CHGJ4253	Changed Job Between Rd 4/2 and Rd 5/3	RJ01, 01A
YCHJ3142	Why Chngd Job Between Rd 3/1 and Rd 4/2	RJ10, 10OV
YCHJ4253	Why Chngd Job Between Rd 4/2 and Rd 5/3	RJ10, 10OV
STJBMM31	Month Started Rd 3/1 CMJ	EM10, 10OV, 10OV2; RJ01, 01A
STJBDD31	Day Started Rd 3/1 CMJ	EM10, 10OV, 10OV2; RJ01, 01A
STJBYY31	Year Started Rd 3/1 CMJ	EM10, 10OV, 10OV2; RJ01, 01A
STJBMM42	Month Started Rd 4/2 CMJ	EM10, 10OV, 10OV2; RJ01, 01A
STJBDD42	Day Started Rd 4/2 CMJ	EM10, 10OV, 10OV2; RJ01, 01A
STJBYY42	Year Started Rd 4/2 CMJ	EM10, 10OV, 10OV2; RJ01, 01A
STJBMM53	Month Started Rd 5/3 CMJ	EM10, 10OV, 10OV2; RJ01, 01A

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
STJBDD53	Day Started Rd 5/3 CMJ	EM10, 10OV, 10OV2; RJ01, 01A
STJBY53	Year Started Rd 5/3 CMJ	EM10, 10OV, 10OV2; RJ01, 01A
EVRETIRE	Person Has Ever Retired	EM 1-3, 101-102, 126-127, 132-133, 138-139, 141, 141OV; RJ 01, 10
COCCP31	Condensed Occupation Code Rd 3/1 CMJ	EM99-100; RJ 01, 01A; Constructed
COCCP42	Condensed Occupation Code Rd 4/2 CMJ	EM99-100; RJ 01, 01A; Constructed
COCCP53	Condensed Occupation Code Rd 5/3 CMJ	EM99-100; RJ 01, 01A; Constructed
PAYVAC31	Paid Vacation at Rd 3/1 CMJ	EM 1-3, 51, 109; RJ 01, 02
PAYVAC42	Paid Vacation at Rd 4/2 CMJ	EM 1-3, 51, 109; RJ 01, 02
PAYVAC53	Paid Vacation at Rd 5/3 CMJ	EM 1-3, 51, 109; RJ 01, 02
SICPAY31	Paid Sick Leave at Rd 3/1 CMJ	EM 1-3, 51, 107; RJ 01, 02
SICPAY42	Paid Sick Leave at Rd 4/2 CMJ	EM 1-3, 51, 107; RJ 01, 02
SICPAY53	Paid Sick Leave at Rd 5/3 CMJ	EM 1-3, 51, 107; RJ 01, 02
PAYDR31	Paid Leave to Visit Dr Rd 3/1 CMJ	EM 1-3, 51, 107-108; RJ 01, 02
PAYDR42	Paid Leave to Visit Dr Rd 4/2 CMJ	EM 1-3, 51, 107-108; RJ 01, 02

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
PAYDR53	Paid Leave to Visit Dr Rd 5/3 CMJ	EM 1-3, 51, 107-108; RJ 01, 02
RETPLN31	Pension Plan at Rd 3/1 CMJ	EM 1-3, 51, 110; RJ 01, 02
RETPLN42	Pension Plan at Rd 4/2 CMJ	EM 1-3, 51, 110; RJ 01, 02
RETPLN53	Pension Plan at Rd 5/3 CMJ	EM 1-3, 51, 110; RJ 01, 02
BSNTY31	Sole Prop, Partner, Corp, Rd 3/1 CMJ	EM 1-3, 51, 94-95; RJ 01, 02
BSNTY42	Sole Prop, Partner, Corp, Rd 4/2 CMJ	EM 1-3, 51, 94-95; RJ 01, 02
BSNTY53	Sole Prop, Partner, Corp, Rd 5/3 CMJ	EM 1-3, 51, 94-95; RJ 01, 02
JOBORG31	Priv (Profit/Nonprofit) Gov Rd 3/1 CMJ	EM 1-3, 51, 96; RJ 01, 02
JOBORG42	Priv (Profit/Nonprofit) Gov Rd 4/2 CMJ	EM 1-3, 51, 96; RJ 01, 02
JOBORG53	Priv (Profit/Nonprofit) Gov Rd 5/3 CMJ	EM 1-3, 51, 96; RJ 01, 02
HELD31X	Health Insur Held from Rd 3/1 CMJ (Ed)	EM117; HX, HP and OE Sections
HELD42X	Health Insur Held from Rd 4/2 CMJ (Ed)	EM117; HX, HP and OE Sections
HELD53X	Health Insur Held from Rd 5/3 CMJ (Ed)	EM117; HX, HP and OE Sections
OFFER31X	Health Insur Offered by Rd 3/1 CMJ (Ed)	EM113, 114, 117; RJ and HX Sections
OFFER42X	Health Insur Offered by Rd 4/2 CMJ (Ed)	EM113, 114, 117; RJ and HX Sections
OFFER53X	Health Insur Offered by Rd 5/3 CMJ (Ed)	EM113, 114, 117; RJ and HX Sections

## MONTHLY HEALTH INSURANCE COVERAGE INDICATORS

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
TRImm01X	Covered By Tricare in mm 01 (Ed), where mm = JA-DE	HX12, 13, PR19-22, HQ Section, RE14, 96A, and age at interview date
MCRmm01	Covered By Medicare In mm 01, where mm = JA-DE	HX05-07, 27, 29, 29OV
MCRmm01X	Covered By Medicare In mm 01 (Ed), where mm = JA-DE	HX05-07, 27, 29, 29OV, see documentation, section 2.5.10 , for additional edit specifications
MCDmm01	Covered By Medicaid or SCHIP in mm 01, where mm = JA-DE	HX10-11, PR07-10 and HQ Section
MCDmm01X	Covered By Medicaid or SCHIP in mm 01 (Ed), where mm = JA-DE	MCDmm01, HX14-16, 18-19, 41-43, 45, PR11-14, 23-32, 39-42
OPAm01	Cov By Other Public A Ins in mm 01, where mm = JA-DE	HX14-15, 41-45, PR 23-32 and HQ Section
OPBmm01	Cov By Other Public B Ins in mm 01, where mm = JA-DE	HX14-15, 41-43, PR23-30 and HQ Section
STAm01	Covered By Other State Prog in mm 01, where mm = JA-DE	HX16-19, PR35-38 and HQ Section
PUBmm01X	Covr By Any Public Ins in mm 01 (Ed), where mm = JA-DE	TRmm01X, MCRmm01X, MCDmm01X, OPAmm01, OPBmm01

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
PEGmm01	Covered By Empl Union Ins in mm 01, where mm = JA-DE	HX2-4, 21-24, 48; HP, OE, HQ, EM, RJ Sections
PDKmm01	Covr By Priv Ins (Source Unknwn) mm 01, where mm = JA-DE	HX21-24, 48, HP, OE, and HQ Sections
PNGmm01	Covered By Nongroup Ins in mm 01, where mm = JA-DE	HX21-24, 48, HP, OE, and HQ Sections
POGmm01	Covered By Other Group Ins in mm 01, where mm = JA-DE	HX21-24, 48, HP, OE, and HQ Sections
PRSmm01	Covered By Self-Emp-1 Ins in mm 01, where mm = JA-DE	HX3, 4, 48, HQ, OE, RJ and EM sections
POUmm01	Covered By Holder Outside Of RU in mm 01, where mm = JA-DE	HX21-24, 48, HP, OE, and HQ Sections
PRImm01	Covered By Private Ins in mm 01, where mm = JA-DE	POGmm01, PDKmm01, PEGmm01, PRSmm01, POUmm01, PNGmm01
HPEmm01	Holder Of Empl Union Ins in mm 01, where mm = JA-DE	PEGmm01, HP9, 11
HPDmm01	Holder Of Priv Ins (Source Unknwn) mm 01, where mm = JA-DE	PDKmm01; HP11
HPNmm01	Holder Of Nongroup Ins in mm 01, where mm = JA-DE	PNGmm01; HP11
HPOmm01	Holder Of Other Group Ins in mm 01, where mm = JA-DE	POGmm01; HP11
HPSmm01	Holder Of Self-Emp-1 Ins in mm 01, where mm = JA-DE	PRSmm01; HP9
HPRmm01	Holder Of Private Insurance in mm 01, where mm = JA-DE	HPEmm01, HPSmm01, HPOmm01, HPNmm01, HRDmm01



<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
INSmm01X	Covr By Hosp/Med Ins in mm 01 (Ed) , where mm = JA-DE	PUBmm01X, PRImm01

### **SUMMARY HEALTH INSURANCE COVERAGE INDICATORS**

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
PRVEV01	Ever Have Private Insurance During 01	Constructed
TRIEV01	Ever Have Tricare During 01	Constructed
MCREV01	Ever Have Medicare During 01	Constructed
MCDEV01	Ever Have Medicaid or SCHIP During 01	Constructed
OPAEV01	Ever Have Other Public A During 01	Constructed
OPBEV01	Ever Have Other Public B During 01	Constructed
UNINS01	Uninsured All of 01	Constructed
INSCOV01	Health Insurance Coverage Indicator 01	Constructed

### **MANAGED CARE VARIABLES**

MCDHMO31	Covered By Medicaid or SCHIP HMO – R3/1	HX10-11, HX14-16, HX18-19, HX41-43, HX45, PR07-10, PR11-14, PR23-32, PR39-42 and HQ Section
MCDHMO42	Covered By Medicaid or SCHIP HMO – R4/2	HX10-11, HX14-16, HX18-19, HX41-43, HX45, PR07-10, PR11-14, PR23-32, PR39-42 and HQ Section

MCDHMO01	Covered By Medicaid or SCHIP HMO – 12/31/01	HX10-11, HX14-16, HX18-19, HX41-43, HX45, PR07-10, PR11-14, PR23-32, PR39-42 and HQ Section
MCDMC31	Cov By Mcaid/SCHIP Gatekeeper Plan-R3/1	MCDHMO31, HX10-11, HX14-16, HX18-19, HX41-43, HX45, PR07-10, PR11-14, PR23-32, PR39-42 and HQ Section
MCDMC42	Cov By Mcaid/SCHIP Gatekeeper Plan-R4/2	MCDHMO42, HX10-11, HX14-16, HX18-19, HX41-43, HX45, PR07-10, PR11-14, PR23-32, PR39-42 and HQ Section
MCDMC01	Covered By Mcaid/SCHIP Gtkeepr Plan-12/31/01	MCDHMO01, HX10-11, HX14-16, HX18-19, HX41-43, HX45, PR07-10, PR11-14, PR23-32, PR39-42 and HQ Section
PRVHMO31	Covered By Private HMO – R3/1	MC01, HX2-4, 21-24,48; HP, OE, HQ, EM, and RJ Sections

PRVHMO42	Covered By Private HMO – R4/2	MC01, HX2-4, 21-24,48; HP, OE, HQ, EM, and RJ Sections
PRVHMO01	Covered By Private HMO –12/31/01	MC01, HX2-4, 21-24,48; HP, OE, HQ, EM, and RJ Sections
PRVMNC31	Covered By Private Gatekeeper Plan-R3/1	MC01-02, HX2-4, 21-24,48; HP, OE, HQ, EM, and RJ Sections
PRVMNC42	Covered By Private Gatekeeper Plan-R4/2	MC01-02, HX2-4, 21-24,48; HP, OE, HQ, EM, and RJ Sections
PRVMNC01	Covered By Priv Gatekeeper Plan-12/31/01	MC01-02, HX2-4, 21-24,48; HP, OE, HQ, EM, and RJ Sections
PRVDRL31	Cov by Priv Plan w/Doctor List – R3/1	MC01-03, HX2-4, 21-24,48; HP, OE, HQ, EM, and RJ Sections
PRVDRL42	Cov by Priv Plan w/Doctor List – R4/2	MC01-03, HX2-4, 21-24,48; HP, OE, HQ, EM, and RJ Sections
PRVDRL01	Cov by Priv Plan w/Doctor List-12/31/01	MC01-03, HX2-4, 21-24,48; HP, OE, HQ, EM, and RJ Sections
PHMONP31	Cov by HMO-Pays Non-Plan Dr Visits-R3/1	PRVHMO31, HX60A, MC05, MC01-03, HX2-4, 21-24,48; HP, OE, HQ, EM, and RJ Sections

PHMONP42	Cov by HMO-Pays Non-Plan Dr Visits-R4/2	PRVHMO42, HX60A, MC05, MC01-03, HX2- 4, 21-24,48; HP, OE, HQ, EM, and RJ Sections
PHMONP01	Cov by HMO-Pays Non-Plan Drs Vis-12/31/01	PRVHMO01, HX60A, MC05, MC01-03, HX2- 4, 21-24,48; HP, OE, HQ, EM, and RJ Sections
PMNCNP31	Cov by Gatekpr-Pays Non-Plan Drs-R3/1	PRVMNC31, MC04, MC01- 03, HX2-4, 21- 24,48; HP, OE, HQ, EM, and RJ Sections
PMNCNP42	Cov by Gatekpr-Pays Non-Plan Drs-R4/2	PRVMNC42, MC04, MC01- 03, HX2-4, 21- 24,48; HP, OE, HQ, EM, and RJ Sections
PMNCNP01	Cov by Gatekpr-Pays Non-Plan Drs-12/31/01	PRVMNC01, MC04, MC01- 03, HX2-4, 21- 24,48; HP, OE, HQ, EM, and RJ Sections
PRDRNP31	Cov by Dr List-Pays Non-Plan Drs-R3/1	PRVDRL31, MC04, MC01- 03, HX2-4, 21- 24,48; HP, OE, HQ, EM, and RJ Sections
PRDRNP42	Cov by Dr List-Pays Non-Plan Drs-R4/2	PRVDRL42, MC04, MC01- 03, HX2-4, 21- 24,48; HP, OE, HQ, EM, and RJ Sections

PRDRNP01	Cov by Dr List-Pays Non-Plan Drs-12/31/01	PRVDRL01, MC04, MC01- 03, HX2-4, 21- 24,48; HP, OE, HQ, EM, and RJ Sections
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### DURATION OF HEALTH INSURANCE VARIABLES

VARIABLE	DESCRIPTION	SOURCE
PREVCOVR	Was Person Covered By Ins In Previous Two Years – Panel 5 Only	HX64
COVRMM	Month Most Recently Covered – Panel 5 Only	HX65
COVRY	Year Most Recently Covered – Panel 5 Only	HX65
WASESTB	Was Prev Ins By Union Or Employer – Panel 5 Only	HX66, HX78
WASMCARE	Was Prev Ins By Medicare – Panel 5 Only	HX66, HX78
WASMCAID	Was Prev Ins By Medicaid/SCHIP – Panel 5 Only	HX66, HX78
WASCHAMP	Was Prev Ins By Champus/Champva – Panel 5 Only	HX66, HX78
WASVA	Was Prev Ins By VA/Military Care – Panel 5 Only	HX66, HX78
WASPRIV	Was Prev Ins By Group/Assoc/Ins Co – Panel 5 Only	HX66, HX78
WASOTGOV	Insurance That Ended Was Other Govt Prog – Panel 5 Only	HX66, HX78
WASAFDC	Was Prev Ins By Public AFDC– Panel 5 Only	HX66, HX78
WASSSI	Was Prev Ins By SSI Program – Panel 5 Only	HX66, HX78
WASSTAT1	Was Prev Ins By State Program 1 – Panel 5 Only	HX66, HX78
WASSTAT2	Was Prev Ins By State Program 2 – Panel 5 Only	HX66, HX78
WASOTHER	Was Prev Ins By Some Other Source – Panel 5 Only	HX66, HX78
NOINSBEF	Ever Without Health Insurance In Previous Year – Panel 5 Only	HX70
NOINSTM	Num Weeks/Months Without HI In Previous Year – Panel 5 Only	HX71
NOINUNIT	Unit For Time Without Health Insurance – Panel 5 Only	HX71OV
MORECOVR	Covered By More Comprehensive Plan In Previous Two Years – Panel 5 Only	HX76
INSENDMM	Month Most Recently Covered – Panel 5 Only	HX77
INSENDYY	Year Most Recently Covered – Panel 5 Only	HX77

## PRE-EXISTING CONDITIONS EXCLUSIONS/DENIAL OF INSURANCE

VARIABLE	DESCRIPTION	SOURCE
DENYINSR	Person Ever Denied Insurance – Panel 5 Only	HX67,HX74, HX79
DNYCANC	Cancer Caused Insurance Denial – Panel 5 Only	HX68,HX75, HX80
DNYHYPER	Hypertension Caused Insurance Denial – Panel 5 Only	HX68,HX75, HX80
DNYDIAB	Diabetes Caused Insurance Denial – Panel 5 Only	HX68,HX75, HX80
DNYCORON	Coronary Artery Disease Caused Insurance Denial – Panel 5 Only	HX68,HX75, HX80
DENYOTH	Other Reason Caused Insurance Denial – Panel 5 Only	HX68,HX75, HX80
INSLOOK	Person Ever Looked For Insurance? – Panel 5 Only	HX69
INSLIMIT	Any Limit/Restrictions On Insurance – Panel 5 Only	HX72
LMTBACK	Condition Caused Limit: Back Problems – Panel 5 Only	HX73
LIMITOT	Condition Caused Limit: Other – Panel 5 Only	HX73

## OTHER HEALTH INSURANCE COVERAGE VARIABLES

VARIABLE	DESCRIPTION	SOURCE
TRICR31X	PID Cov By Tricare - Rd 31 Int (Ed)	Constructed
TRICR42X	PID Cov By Tricare - Rd 42 Int (Ed)	Constructed
TRICR53X	PID Cov By Tricare - Rd 53 Int (Ed)	Constructed
TRICR01X	PID Cov By Tricare - 12/31/01 (Ed)	Constructed
TRIAT31X	At Any Time Coverage By Tricare - Rd 31	Constructed
TRIAT42X	At Any Time Coverage By Tricare- Rd 42	Constructed
TRIAT53X	At Any Time Coverage By Tricare- Rd 53	Constructed
TRIAT01X	At Any Time Cov By Tricare - 12/31/01	Constructed
MCAID31	Cov By Medicaid of SCHIP - Rd 31 Int	Constructed
MCAID42	Cov By Medicaid Or SCHIP - Rd 42 Int	Constructed
MCAID53	Cov By Medicaid Or SCHIP - Rd 53 Int Date	Constructed
MCAID01	PID Cov By Medicaid Or SCHIP - 12/31/01	Constructed
MCAID31X	PID Cov By Medicaid Or SCHIP - Rd 31 Int Date (Ed)	Constructed
MCAID42X	PID Cov By Medicaid Or SCHIP - Rd 42 Int Date (Ed)	Constructed
MCAID53X	PID Cov By Medicaid Or SCHIP - Rd 53 Int Date (Ed)	Constructed
MCAID01X	PID Cov By Medicaid Or SCHIP - 12/31/01 (Ed)	Constructed

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
MCARE31	PID Cov By Medicare - Rd 31 Int Date	Constructed
MCARE42	PID Cov By Medicare - Rd 42 Int Date	Constructed
MCARE53	PID Cov By Medicare - Rd 53 Int Date	Constructed
MCARE01	PID Cov By Medicare - 12/31/01	Constructed
MCARE31X	PID Cov By Medicare - Rd 31 Int Date (Ed)	Constructed
MCARE42X	PID Cov By Medicare - Rd 42 Int Date (Ed)	Constructed
MCARE53X	PID Cov By Medicare - Rd 53 Int Date (Ed)	Constructed
MCARE01X	PID Cov By Medicare - 12/31/01 (Ed)	Constructed
MCDAT31X	At Any Time Coverage By Medicaid Or SCHIP - Rd 31	Constructed
MCDAT42X	At Any Time Coverage By Medicaid Or SCHIP - Rd 42	Constructed
MCDAT53X	At Any Time Coverage By Medicaid Or SCHIP - Rd 53	Constructed
MCDAT01X	At Any Time Cov By Medicaid Or SCHIP - 12/31/01	Constructed
OTPAAT31	Any Time Cov By/Pays Oth Gov Mcaid HMO - Rd 31	Constructed
OTPAAT42	Any Time Cov By/Pays Oth Gov Mcaid HMO - Rd 42	Constructed
OTPAAT53	Any Time Cov By/Pays Oth Gov Mcaid HMO - Rd 53	Constructed
OTPAAT01	Any Time Cov By/Pays Oth Gov Mcaid HMO - 12/31/01	Constructed
OTPBAT31	Any Time Cov By Oth Gov Not Mcaid HMO -Rd 31	Constructed
OTPBAT42	Any Time Cov By Oth Gov Not Mcaid HMO -Rd 42	Constructed
OTPBAT53	Any Time Cov By Oth Gov Not Mcaid HMO -Rd 53	Constructed
OTPBAT01	Any Time Cov By Oth Gov Not Mcaid HMO -12/31/01	Constructed
OTPUBA31	Cov By/Pays Oth Gov Mcaid HMO - Rd 31 Int	Constructed
OTPUBA42	Cov By/Pays Oth Gov Mcaid HMO - Rd 42 Int	Constructed
OTPUBA53	Cov By/Pays Oth Gov Mcaid HMO - Rd 53 Int	Constructed
OTPUBA01	Cov By/Pays Oth Gov Mcaid HMO - 12/31/01	Constructed
OTPUBB31	Cov By Oth Gov Not Mcaid HMO - Rd 31 Int	Constructed
OTPUBB42	Cov By Oth Gov Not Mcaid HMO - Rd 42 Int	Constructed
OTPUBB53	Cov By Oth Gov Not Mcaid HMO - Rd 53 Int	Constructed
OTPUBB01	Cov By Oth Gov Not Mcaid HMO - 12/31/01	Constructed
PRIDK31	PID Cov By Priv Ins (Dk Plan)- Rd 31 Int	Constructed
PRIDK42	PID Cov By Priv Ins (Dk Plan) -Rd 42 Int	Constructed
PRIDK53	PID Cov By Priv Ins (Dk Plan) -Rd 53 Int	Constructed
PRIDK01	PID Cov By Priv Ins (Dk Plan) - 12/31/01	Constructed
PRIEU31	PID Cov By Empl/Union Grp Ins- Rd 31 Int	Constructed
PRIEU42	PID Cov By Empl/Union Grp Ins- Rd 42 Int	Constructed
PRIEU53	PID Cov By Empl/Union Grp Ins- Rd 53 Int	Constructed
PRIEU01	PID Cov By Empl/Union Grp Ins - 12/31/01	Constructed
PRING31	PID Cov By Non-Group Ins - Rd 31 Int Dt	Constructed
PRING42	PID Cov By Non-Group Ins - Rd 42 Int Dt	Constructed
PRING53	PID Cov By Non-Group Ins - Rd 53 Int Dt	Constructed
PRING01	PID Cov By Non-Group Ins - 12/31/01	Constructed

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
PRIOG31	PID Cov By Other Group Ins - Rd 31 Int Dt	Constructed
PRIOG42	PID Cov By Other Group Ins- Rd 42 Int Dt	Constructed
PRIOG53	PID Cov By Other Group Ins - Rd 53 Int Dt	Constructed
PRIOG01	PID Cov By Other Group Ins - 12/31/01	Constructed
PRIS31	PID Cov By Self-Emp-1 Ins - Rd 31 Int Dt	Constructed
PRIS42	PID Cov By Self-Emp-1 Ins - Rd 42 Int Dt	Constructed
PRIS53	PID Cov By Self-Emp-1 Ins - Rd 53 Int Dt	Constructed
PRIS01	PID Cov By Self-Emp-1 Ins - 12/31/01	Constructed
PRIV31	PID Has Private Hlth Ins - Rd 31 Int Date	Constructed
PRIV42	PID Has Private Hlth Ins- Rd 42 Int Date	Constructed
PRIV53	PID Has Private Hlth Ins - Rd 53 Int Date	Constructed
PRIV01	PID Has Private Hlth Ins - 12/31/01	Constructed
PRIVAT31	Any Time Cov By Private - Rd 31	Constructed
PRIVAT42	Any Time Cov By Private - Rd 42	Constructed
PRIVAT53	Any Time Cov By Private - Rd 53	Constructed
PRIVAT01	Any Time Cov By Private - 12/31/01	Constructed
PROUT31	PID Cov By Someone Out Of RU - Rd 31 Int	Constructed
PROUT42	PID Cov By Someone Out Of RU - Rd 42 Int	Constructed
PROUT53	PID Cov By Someone Out Of RU - Rd 53 Int	Constructed
PROUT01	PID Cov By Someone Out Of RU - 12/31/01	Constructed
PUB31X	PID Cov By Public Ins-Rd 31 Int Date (Ed)	Constructed
PUB42X	PID Cov By Public Ins-Rd 42 Int Date (Ed)	Constructed
PUB53X	PID Cov By Public Ins-Rd 53 Int Date (Ed)	Constructed
PUB01X	PID Cov By Public Ins - 12/31/01 (Ed)	Constructed
PUBAT31X	At Any Time Cov By Public - Rd 31	Constructed
PUBAT42X	At Any Time Cov By Public - Rd 42	Constructed
PUBAT53X	At Any Time Cov By Public - Rd 53	Constructed
PUBAT01X	At Any Time Cov By Public - 12/31/01	Constructed
INS31X	PID Is Insured - Rd 31 Int Date (Ed)	Constructed
INS42X	PID Is Insured - Rd 42 Int Date (Ed)	Constructed
INS53X	PID Is Insured - Rd 53 Int Date (Ed)	Constructed
INS01X	PID Is Insured - 12/31/01 (Ed)	Constructed
INSAT31X	Insured Any Time In Rd31	Constructed
INSAT42X	Insured Any Time In Rd42	Constructed
INSAT53X	Insured Any Time In Rd53	Constructed
INSAT01X	Insured Any Time In Rd3 Until 12/31/01 /Rd 5	Constructed
STAPR31	PID Cov By State-Specific Prog-Rd 31 Int	Constructed
STAPR42	PID Cov By State-Specific Prog-Rd 42 Int	Constructed
STAPR53	PID Cov By State-Specific Prog-Rd 53 Int	Constructed
STAPR01	PID Cov By State-Specific Prog-12/31/01	Constructed



<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
STPRAT31	At Any Time Coverage By State Ins - Rd 31	Constructed
STPRAT42	At Any Time Coverage By State Ins - Rd 42	Constructed
STPRAT53	At Any Time Coverage By State Ins - Rd 53	Constructed
STPRAT01	At Any Time Cov By State Ins - 12/31/01	Constructed

### **DENTAL AND PRESCRIPTION DRUG PRIVATE INSURANCE VARIABLES**

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
DENTIN31	Dental insurance coverage - R3/1	HX 48, OE 10, OE 24, OE 37
DENTIN42	Dental insurance coverage - R4/2	HX 48, OE 10, OE 24, OE 37
DENTIN53	Dental insurance coverage - R5/3	HX 48, OE 10, OE 24, OE 37
PMEDIN31	Prescription drug insurance - R3/1	HX 48, OE 10, OE 24, OE 37
PMEDIN42	Prescription drug insurance - R4/2	HX 48, OE 10, OE 24, OE 37
PMEDIN53	Prescription drug insurance - R5/3	HX 48, OE 10, OE 24, OE 37

### DISABILITY DAYS VARIABLES

VARIABLE	DESCRIPTION	SOURCE
DDNWRK31	Health Problem Causes Work Loss (R31)	DD 02
DDNWRK42	Health Problem Causes Work Loss (R42)	DD 02
DDNWRK53	Health Problem Causes Work Loss (R53)	DD 02
WKINBD31	½ Or More Of Workloss Day Spent In Bed (R31)	DD 04
WKINBD42	½ Or More Of Workloss Day Spent In Bed (R42)	DD 04
WKINBD53	½ Or More Of Workloss Day Spent In Bed (R53)	DD 04
DDNSCL31	Health Problem Causes School Loss Day (R31)	DD 05
DDNSCL42	Health Problem Causes School Loss Day (R42)	DD 05
DDNSCL53	Health Problem Causes School Loss Day (R53)	DD 05
SCLNBD31	½ Or More Of School Loss Day Spent In Bed (R31)	DD 07
SCLNBD42	½ Or More Of School Loss Day Spent In Bed (R42)	DD 07
SCLNBD53	½ Or More Of School Loss Day Spent In Bed (R53)	DD 07
DDBDYS31	Bed Days Other Than Work Or School Loss Days (R31)	DD 08
DDBDYS42	Bed Days Other Than Work Or School Loss Days (R42)	DD 08
DDBDYS53	Bed Days Other Than Work Or School Loss Days (R53)	DD 08
OTHDYS31	Work Loss Days Because Of Other's Health (R31)	DD 10
OTHDYS42	Work Loss Days Because Of Other's Health (R42)	DD 10
OTHDYS53	Work Loss Days Because Of Other's Health (R53)	DD 10
OTHNDD31	Number Work Loss Days For Other's Health (R31)	DD 11
OTHNDD42	Number Work Loss Days For Other's Health (R42)	DD 11
OTHNDD53	Number Work Loss Days For Other's Health (R53)	DD 11

### ACCESS TO CARE VARIABLES

VARIABLE	DESCRIPTION	SOURCE
ACCELI42	Pers Eligible For Access Supplement	Constructed
HAVEUS42	AC 01 Does Person Have A USC Provider?	AC01
YNOUSC42	AC 03 Main Reason Pers Doesn't Have A USC	AC03
NOREAS42	AC 04 Oth Reas No USC: No Other Reasons	AC04
SELDSI42	AC 04 Oth Reas No USC: Seldom Or Nev Sick	AC04
NEWARE42	AC 04 Oth Reas No USC: Recently Moved	AC04
DKWHRU42	AC 04 Oth Reas No USC: Dk Where To Go	AC04
USCNOT42	AC 04 Oth Reas No USC: USC Not Available	AC04
PERSLA42	AC 04 Oth Reas No USC: Language	AC04
DIFFPLA42	AC 04 Oth Reas No USC: Different Places	AC04
INSRPL42	AC 04 Oth Reas No USC: Just Changed Insur	AC04

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
MYSELF42	AC 04 Oth Reas No USC: No Docs/Treat Self	AC04
CARECO42	AC 04 Oth Reas No USC: Cost Of Med Care	AC04
OTHINS42	AC 04 Oth Reas No USC: Ins Related Reason	AC04
OTHREA42	AC 04 Oth Reas No USC: Other Reason	AC04
TYPEPL42	USC Type Of Place	AC06, AC07
PROVTY42	Provider Type	PV01, PV03, PV05, PV10
YGOTOU42	AC 08 Main Reason Pers Goes To Hosp USC	AC08
NOREA942	AC 09 Oth Reas Go To USC: No Other Reasons	AC09
LIKESU42	AC 09 Oth Reas Go To USC: Prefers/Likes	AC09
DKELSE42	AC 09 Oth Reas Go To USC: Dk Wh Else To Go	AC09
AFFORD42	AC 09 Oth Reas Go To USC: Can't Afford Oth	AC09
OFFICE42	AC 09 Oth Reas Go To USC: Dr Office At OPD	AC09
AVAILT42	AC 09 Oth Reas Go To USC: Avail When Time	AC09
CONVEN42	AC 09 Oth Reas Go To USC: Convenience	AC09
BSTPLA42	AC 09 Oth Reas Go To USC: Best For Cond	AC09
INSREA42	AC 09 Oth Reas Go To USC: Insurance-Related	AC09
OTHRE942	AC 09 Oth Reas Go To USC: Other Reason	AC09
GETTOU42	AC 09a How Does Persn Get To USC Provider	AC09A
TYPEPE42	USC Type Of Provider	AC10, AC11, AC110V, AC12, AC120V
LOCATI42	USC Location	Constructed
MINORP42	AC 14 Go To USC For New Health Problem	AC14
PREVEN42	AC 14 Go To USC For Preventive Health Care	AC14
REFFRL42	AC 14 Go To USC For Referrals	AC14
OFFHOU42	AC 15 USC Has Office Hrs Nights/Weekends	AC15
APPTWL42	AC 16 When See USC, Have Appt Or Walk In	AC16
APPDIF42	AC 17 How Difficult To Get Appt With USC	AC17
WAITTI42	AC 18 With Appt, How Long Til Seen By USC	AC18
PHONED42	AC 19 How Difficult Contact USC By Phone	AC19
PRLIST42	AC 19a Does USC Prov Listen?	AC19A
TREATM42	AC 19b Prov Ask About Other Treatments	AC19B
CONFID42	AC 19c Confident In USC Prov's Ability?	AC19C
PROVST42	AC 19d How Satisfied With USC Staff	AC19D
USCQUA42	AC 19e Satisfied With Quality Of Care	AC19E
CHNGUS42	AC 20 Has Anyone Changed USC In Last Year	AC20
YCHNGU42	AC 21 Why Did Person(S) Change USC	AC21
ANYUSC42	AC 22 Has Anyone Had A USC In Last Year	AC22
YNOMOR42	AC 23 Why Don't They Have A USC Anymore?	AC23

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
NOCARE42	AC 24 Did Anyone Go W/Out Health Care?	AC24
HCNEED42	AC 24a Satisfied Family Can Get Care	AC24A
OBTAIN42	AC 25 Anyone Have Difficlty Obtain Care	AC25
MAINPR42	AC 25a Main Reason Experienced Difficulty	AC25A
NOOTHP42	AC 26 Difficulty: No Other Problems	AC26
NOAFFO42	AC 26 Difficulty: Couldn't Afford Care	AC26
INSNOP42	AC 26 Difficulty: Ins Company Won't Pay	AC26
PREEXC42	AC 26 Difficulty: Pre-Existing Condition	AC26
INSRQR42	AC 26 Difficulty: Ins Required Referral	AC26
REFUSI42	AC 26 Difficulty: Dr Refused Ins Plan	AC26
DISTAN42	AC 26 Difficulty: Distance	AC26
PUBTRA42	AC 26 Difficulty: Public Transportation	AC26
EXPENS42	AC 26 Difficulty: Too Expen To Get There	AC26
HEARPR42	AC 26 Difficulty: Hearing Impair/ Loss	AC26
LANGBA42	AC 26 Difficulty: Language Barrier	AC26
INTOBL42	AC 26 Difficulty: Hard To Get Into Bldg	AC26
INSIDE42	AC 26 Difficulty: Hard To Get Around	AC26
EQUIPM42	AC 26 Difficulty: No Appropriate Equip	AC26
OFFWOR42	AC 26 Difficulty: Couldn't Get Time Off	AC26
DKWHER42	AC 26 Difficulty: Dk Where To Go	AC26
REFUSE42	AC 26 Difficulty: Was Refused Services	AC26
CHLDCA42	AC 26 Difficulty: Couldn't Get Child Care	AC26
NOTIME42	AC 26 Difficulty: No Time/Took Too Long	AC26
OTHRPR42	AC 26 Difficulty: Other	AC26

#### HEALTH STATUS VARIABLES - PUBLIC USE

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
RTHLTH31	Perceived Health Status – RD 3/1	CE 1
RTHLTH42	Perceived Health Status – RD 4/2	CE 1
RTHLTH53	Perceived Health Status – RD 5/3	CE 1
RTPROX31	Self/Proxy Rating Of Health – RD 3/1	CE 10V
RTPROX42	Self/Proxy Rating Of Health – RD 4/2	CE 10V
RTPROX53	Self/Proxy Rating Of Health – RD 5/3	CE 10V
MNHLTH31	Perceived Mental Health Status – RD 3/1	CE 2
MNHLTH42	Perceived Mental Health Status – RD 4/2	CE 2
MNHLTH53	Perceived Mental Health Status – RD 5/3	CE 2
MNPROX31	Self/Proxy Rating Of Mental Health – RD 3/1	CE 20V

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
MNPROX42	Self/Proxy Rating Of Mental Health – RD 4/2	CE 20V
MNPROX53	Self/Proxy Rating Of Mental Health – RD 5/3	CE 20V
IADLHP31	IADL Screener – RD 3/1	HE 2-4
IADLHP42	IADL Screener – RD 4/2	HE 2-4
IADLHP53	IADL Screener – RD 5/3	HE 2-4
ADLHLP31	ADL Screener – RD 3/1	HE 5-6
ADLHLP42	ADL Screener – RD 4/2	HE 5-6
ADLHLP53	ADL Screener – RD 5/3	HE 5-6
AIDHLP31	Used Assistive Devices – RD 3/1	HE 7-8
AIDHLP53	Used Assistive Devices – RD 5/3	HE 7-8
WLKLIM31	Limitation In Physical Functioning – RD 3/1	HE 9-18
WLKLIM53	Limitation In Physical Functioning – RD 5/3	HE 9-18
LFTDIF31	Difficulty Lifting 10 Pounds – RD 3/1	HE 11
LFTDIF53	Difficulty Lifting 10 Pounds – RD 5/3	HE 11
STPDIF31	Difficulty Walking Up 10 Steps – RD 3/1	HE 12
STPDIF53	Difficulty Walking Up 10 Steps – RD 5/3	HE 12
WLKDIF31	Difficulty Walking 3 Blocks – RD 3/1	HE 13
WLKDIF53	Difficulty Walking 3 Blocks – RD 5/3	HE 13
MILDIF31	Difficulty Walking A Mile – RD 3/1	HE 14
MILDIF53	Difficulty Walking A Mile – RD 5/3	HE 14
STNDIF31	Difficulty Standing 20 Minutes – RD 3/1	HE 15
STNDIF53	Difficulty Standing 20 Minutes – RD 5/3	HE 15
BENDIF31	Difficulty Bending/Stooping – RD 3/1	HE 16
BENDIF53	Difficulty Bending/Stooping – RD 5/3	HE 16
RCHDIF31	Difficulty Reaching Overhead – RD 3/1	HE 17
RCHDIF53	Difficulty Reaching Overhead – RD 5/3	HE 17
FNGRDF31	Difficulty Using Fingers To Grasp – RD 3/1	HE 18
FNGRDF53	Difficulty Using Fingers To Grasp – RD 5/3	HE 18
ACTLIM31	Any Limitation Work/Housewrk/Schl – RD 3/1	HE 19-20
ACTLIM53	Any Limitation Work/Housewrk/Schl – RD 5/3	HE 19-20
WRKLIM31	Work Limitation – RD 3/1	HE 20A
WRKLIM53	Work Limitation – RD 5/3	HE 20A
HSELIM31	Housework Limitation – RD 3/1	HE 20A
HSELIM53	Housework Limitation – RD 5/3	HE 20A
SCHLIM31	School Limitation – RD 3/1	HE 20A
SCHLIM53	School Limitation – RD 5/3	HE 20A
UNABLE31	Completely Unable To Do Activity – RD 3/1	HE 21
UNABLE53	Completely Unable To Do Activity – RD 5/3	HE 21
SOCLIM31	Social Limitations – RD 3/1	HE 22-23

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
SOCLIM53	Social Limitations – RD 5/3	HE 22-23
COGLIM31	Cognitive Limitations – RD 3/1	HE 24-25
COGLIM53	Cognitive Limitations – RD 5/3	HE 24-25
WRGLAS42	Wears Glasses or Contacts – RD 4/2	HE 26-27
SEEDIF42	Diffclty Seeing W/Glasses/Cntcts–RD 4/2	HE 28-29
BLIND42	Person Is Blind – RD 4/2	HE 30
READNW42	Can Read Newsprnt W/Glasses/Cntcts-RD4/2	HE 31
RECPEP42	Can Recgnze People W/Glasses/Cntcts-RD4/2	HE 32
VISION42	Vision Impairment (Summary) – RD 4/2	Constructed
HEARAD42	Person Wears Hearing Aid – RD 4/2	HE 33-34
HEARDI42	Any Diffclty Hearing W/Hearing Aid–RD4/2	HE 35-36
DEAF42	Person Is Deaf – RD 4/2	HE 37
HEARMO42	Can Hear Most Conversation – RD 4/2	HE 38
HEARSM42	Can Hear Some Conversation – RD 4/2	HE 39
HEARNG42	Hearing Impairment (Summary) – RD 4/2	Constructed
ANYLIM01	Any Limitation in P5R3,4,5/P6R1,2,3	Constructed
LSHLTH42	Less Healthy than Othr Child (0-17)-R4/2	CS01_01
NEVILL42	Never Been Seriously Ill (0-17)-R4/2	CS01_02
SICEAS42	Child Gets Sick Easily (0-17)-R4/2	CS01_03
HLTHLF42	Child Will Have Healthy Life (0-17)-R4/2	CS01_04
WRHLTH42	Worry More about Health (0-17)-R4/2	CS01_05
CHPMED42	CSHCN: Child Needs Prescrib Med(0-17)-R4/2	CS03
CHPMHB42	CSHCN: Pmed for Hlth/Behv Cond (0-17)-R4/2	CS03OV1
CHPMC42	CSHCN: Pmed Cond Last 12+ Mos (0-17)-R4/2	CS03OV2
CHSERV42	CSHCN: Chld Needs Med&Oth Serv (0-17)-R4/2	CS04
CHSRHB42	CSHCN: Serv for Hlth/Behav Cond(0-17)-R4/2	CS04OV1
CHSRCN42	CSHCN: Serv Cond Last 12+ Mos (0-17)-R4/2	CS04OV2
CHLIMI42	CSHCN: Limited in Any Way (0-17)-R4/2	CS05
CHLIHB42	CSHCN: Limt for Hlth/Behav Cond(0-17)-R4/2	CS05OV1
CHLICO42	CSHCN: Limit Cond Last 12+ Mos (0-17)-R4/2	CS05OV2
CHTHER42	CSHCN: Chld Needs Spec Therapy (0-17)-R4/2	CS06
CHTHHB42	CSHCN: Spec Ther for Hlth+Cond(0-17)-R4/2	CS06OV1
CHTHCO42	CSHCN: Ther Cond Last 12+ Mos (0-17)-R4/2	CS06OV2
CHCOUN42	CSHCN: Child Needs Counseling (0-17)-R4/2	CS07
CHEMPB42	CSHCN: Couns Prob last 12+ Mos (0-17)-R4/2	CS07OV
CSHCN42	CSHCN: Child with Special Health Care Needs	Constructed
MOMPRO42	Problem Getting Along W/Mom (5-17)-R4/2	CS08_01
DADPRO42	Problem Getting Along W/Dad (5-17)-R4/2	CS08_02
UNHAP42	Problem Feeling Unhappy/Sad (5-17)-R4/2	CS08_03

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
SCHLBH42	Problem Behavior At School (5-17)-R4/2	CS08_04
HAVFUN42	Problem Having Fun (5-17) – R4/2	CS08_05
ADUPRO42	Prblm Getting Along W/Adults (5-17)-R4/2	CS08_06
NERVAF42	Prblm Feeling Nervous/Afraid (5-17)-R4/2	CS08_07
SIBPRO42	Problem Getting Along W/Sibs (5-17)-R4/2	CS08_08
KIDPRO42	Prblm Getting Along W/Kids (5-17)-R4/2	CS08_09
SPRPRO42	Problem W/Sports/Hobbies (5-17)–R4/2	CS08_10
SCHPRO42	Problem With Schoolwork (5-17)-R4/2	CS08_11
HOMEBH42	Problem W/Behavior At Home (5-17)-R4/2	CS08_12
TRBLE42	Prblm Stay Out Of Trouble (5-17)-R4/2	CS08_13
CHRTCR42	CAHPS:12Mos: Make Rout Care Apt (0-17)R4/2	CS09
CHRTWW42	CAHPS:12Mos: Rout Apt Whn Wntd (0-17)R4/2	CS10
CHILCR42	CAHPS:12Mos: Ill/Inj Need Care (0-17)R4/2	CS11
CHILWW42	CAHPS:12Mos: Ill Care Whn Wntd (0-17)R4/2	CS12
CHAPPT42	CAHPS:12Mos: # of Off/Clin Apts (0-17)R4/2	CS13
CHNECR42	CAHPS:12Mos: Prob Get Nec Care (0-17)R4/2	CS14
CHLIST42	CAHPS:12Mos: Chld Dr Lsn to You (0-17)R4/2	CS15
CHEXPL42	CAHPS:12Mos: Chld Dr Expl Thng (0-17)R4/2	CS116
CHRESP42	CAHPS:12Mos: Chld's Dr Shw Resp(0-17)R4/2	CS17
CHPRTM42	CAHPS:12Mos: Child Dr Engh Time(0-17)R4/2	CS18
CHHECR42	CAHPS:12Mos: Rate Chld Hlt Care (0-17)R4/2	CS19
CHSPEC42	CAHPS:12Mos: Chld Needed Spec (0-17)R4/2	CS20
CHPRE42	CAHPS:12Mos: Prb W/Rfr to Spec (0-17)R4/2	CS21
MESHGT42	Doctor Ever Measured Height (0-17)-R4/2	CS22
WHNHGT42	When Doctor Measured Height (0-17)-R4/2	CS22OV
MESWGT42	Doctor Ever Measured Weight (0-17)-R4/2	CS24
WHNWGT42	When Doctor Measured Weight (0-17)-R4/2	CS24OV
CHBMIX42	Child's Body Mass Index (3-17)-R4/2	Constructed
MESVIS42	Doctor Checked Child's Vision (3-6)-R4/2	CS26
MESBPR42	Dr Checked Blood Pressure (2-17)-R4/2	CS27
WHNBPR42	When Dr Checked Blood Press (2-17)-R4/2	CS27OV
DENTAL42	Dr Advise Reg Dental Checkup (2-17)-R4/2	CS28
WHNDEN42	When Dr Advise Dent Checkup (2-17)-R4/2	CS28OV
EATHLT42	Dr Advise Eat Healthy (2-17)-R4/2	CS29
WHNEAT42	When Dr Advise Eat Healthy (2-17)-R4/2	CS29OV
PHYSCL42	Dr Advise Exercise (2-17)-R4/2	CS30
WHNPHY42	When Dr Advise Exercise (2-17)-R4/2	CS30OV
SAFEST42	Dr Advise Chld Safety Seat (Wt<=40)-R4/2	CS31
WHNSAF42	When Dr Advise Safety Seat (Wt<=40)-R4/2	CS31OV

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
BOOST42	Dr Advise Booster Seat (40<Wt<=80)-R4/2	CS32
WHNBST42	Whn Dr Advise Booster Seat(40<Wt<=80)-R4/2	CS32OV
LAPBLT42	Dr Advise Lap/Shoulder Belt (80<Wt)-R4/2	CS33
WHNLAP42	Whn Dr Advise Lap/Shldr Blt (80<Wt)-R4/2	CS33OV
HELMET42	Dr Advise Bike Helmet (2-17)-R4/2	CS34
WHNHEL42	When Dr Advise Bike Helmet (2-17)-R4/2	CS34OV
NOSMOK42	Dr Advise Smkg in Home is Bad(0-17)-R4/2	CS35
WHNSMK42	Whn Dr Advis Smkg in Home Bad(0-17)-R4/2	CS35OV
TIMALN42	Doctor Spend Any Time Alone (12-17)-R4/2	CS36
DENTCK53	How Often Dental Check-up – RD 5/3	AP12
CHOLCK53	How Lng Cholest Lst Chck (>17) – RD 5/3	AP16
CHECK53	How Lng Lst Routne Checkup (>17) – RD 5/3	AP17
FLUSHT53	How Lng Last Flu Sht (>17) – RD 5/3	AP18
LSTETH53	Lost All Uppr And Lowr Teeth (>17) – RD 5/3	AP18B
PSA53	How Long Since Last PSA (>39) – RD 5/3	AP19
HYSTER53	Had A Hysterectomy (>17) – RD 5/3	AP20A
PAPSMR53	How Lng Lst Pap Smear Tst (>17) – RD 5/3	AP20
BRSTEX53	How Lng Snce Lst Breast Exam (>17) – RD 5/3	AP21
MAMOGR53	How Lng Snce Lst Mammogram (>29) – RD 5/3	AP22
STOOL53	Bld Stool Tst Kit/Crds Home (>17) – RD 5/3	AP23
WHENST53	Whn Lst Bld Stool Tst Hme Kit (>17) – RD 5/3	AP24
BOWEL53	Sigmoidoscopy/Colonoscopy (>17) – RD 5/3	AP25
WHNBWL53	Lst Sigmoidoscop/Colonoscop (>17) – RD 5/3	AP26
PHYACT53	Mod/Vig Phys Activ 3X Wk (>17) – RD 5/3	AP28
BMINDX53	Adult Body Mass Index (> 17) - Rd 5/3	Constructed
SEATBE53	Wears Seat Belt (>15) – RD 5/3	AP32
SRTHRT53	12MO: Serious Sore Throat (0-17)-RD 5/3	PC01A
THSYMP53	12MO: Sore Thrt/Oth Symptms(0-17)-RD 5/3	PC01B
DRTHRT53	12MO: See Dr for Sore Thrt (0-17)-RD 5/3	PC01C
THANTB53	12MO: Dr Pres Antbtic Sre Thrt (0-17)-RD 5/3	PC01D
THSWAB53	12MO: Dr Gave Throat Swab (0-17)-RD 5/3	PC01E
THSYMF53	12MO: Fam Same Sre Thrt Symp (0-17)-RD 5/3	PC01F
THSWBF53	12MO: Dr Gave Fam Thrt Swab (0-17)-RD 5/3	PC01G
THANTF53	12MO: Dr Pres Fam Atbtic Sr Thrt(0-17)-RD 5/3	PC01H
DIABDX53	Diabetes Diagnosis – RD 5/3	PC02
ASTHDX53	Asthma Diagnosis – RD 5/3	PC04
ASATAK53	Asthma Attack Last 12 Mos– RD 5/3	PC05
ASMED53	Take Meds For Asthma – RD 5/3	PC06
ASSTER53	Take Inhaled Steroids Asthma – RD 5/3	PC07



<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
ASFLOW53	Have Peak Flow Meter At Home – RD 5/3	PC08
HIBPDX53	High Blood Pressure Diag (>17) – RD 5/3	PC09
BPMLDX53	Mult Diag High Blood Press (>17) – RD 5/3	PC10
BPCHEK53	Time Snce Lst Blood Pres Chk (>17) – RD 5/3	PC11
BPMONT53	# Mos Snce Lst Blood Pres Chk (>17) – RD 5/3	PC11OV
CHDDX53	Coronary Hrt Disease Diag (>17) – RD 5/3	PC12_01
ANGIDX53	Angina Diagnosis (>17) – RD 5/3	PC12_02
MIDX53	Heart Attack (MI) Diag (>17) – RD 5/3	PC12_03
OHRTDX53	Other Heart Disease Diag (>17) – RD 5/3	PC12_04
STRKDX53	Stroke Diagnosis (>17) – RD 5/3	PC12_05
EMPHDX53	Emphysema Diagnosis (>17) – RD 5/3	PC12_06
NOFAT53	Restrict HGH Fat/Choles Food (>17)–RD 5/3	PC13_01
EXRCIS53	Advised to Exercise More (>17) – RD 5/3	PC13_02
ASPRIN53	Tke Aspirn Every (Othr) Day (>17)–RD 5/3	PC15
NOASPR53	Taking Aspirin Unsafe (>17) – RD 5/3	PC16
STOMCH53	Tke Asprn Unsafe B/C Stomch (>17) – RD 5/3	PC17
JTPAIN53	Joint Pain Last 12 Months (>17) – RD 5/3	PC18
ARTHDX53	Arthritis Diagnosis (>17) – RD 5/3	PC19
ARTHTX53	Arthritis Treatmnt Currently (>17)RD5/3	PC20
SVERLANG	SAQ: Language of Administration for SAQ	CAP1 derived
ADPRX42	SAQ: Relationship Of Proxy To Adult	Constructed
ADRTCR42	SAQ 12 Mos: Made Appt Routine Med Care	SAQ Q1
ADRTWW42	SAQ 12 Mos: Got Med Appt When Wanted	SAQ Q2
ADILCR42	SAQ 12Mos: Ill/Injury Needing Immed Care	SAQ Q3
ADILWW42	SAQ 12 Mos: Got Care When Needed Ill/Inj	SAQ Q4
ADAPPT42	SAQ 12 Mos:# Visits To Med Off For Care	SAQ Q5
ADNECR42	SAQ 12Mos: Probs Getting Needed Med Care	SAQ Q6
ADLIST42	SAQ 12 Mos: Doctor Listened To You	SAQ Q7
ADEXPL42	SAQ 12 Mos: Doc Explained So Understood	SAQ Q8
ADRESP42	SAQ 12 Mos: Dr Showed Respect	SAQ Q9
ADPRTM42	SAQ 12 Mos: Dr Spent Enuf Time With You	SAQ Q10
ADHECR42	SAQ 12 Mos: Rating Of Health care	SAQ Q11
ADSMOK42	SAQ: Currently Smoke	SAQ Q12
ADDSMK42	SAQ 12 Mos: Dr Advised Quit Smoking	SAQ Q13
ADDRBP42	SAQ 2 Yrs: Dr Checked Blood Pressure	SAQ Q14
ADSPEC42	SAQ 12 Mos: Needed To See Specialist	SAQ Q15
ADPRRE42	SAQ 12Mos: Problem Getting Spec Referral	SAQ Q16
ADGENH42	SAQ: Health In General SF-12	SAQ Q17
ADDAYA42	SAQ: Hlth Limits Mod Activities SF-12	SAQ Q18

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>SOURCE</b>
ADCLIM42	SAQ: Hlth Limits Climbing Stairs SF-12	SAQ Q19
ADPACC42	SAQ 4 Wks: Did Less B/C Phys Probs SF-12	SAQ Q20
ADPLMT42	SAQ 4 Wks: Limit Wk B/C Phys Probs SF-12	SAQ Q21
PCS42	SAQ Physical Component Summary SF-12 Imputed	SAQ: Q17-28
ADMACC42	SAQ 4 Wks: Did Less B/C Ment Probs SF-12	SAQ Q22
ADMLMT42	SAQ 4 Wks: Lim Wk B/C Ment Probs SF-12	SAQ Q23
MCS42	SAQ Mental Component Summary SF-12 Imputed	SAQ Q17-28
SFFLAG42	SAQ PCS/MCS Imputation Flag SF-12	Constructed
ADPAIN42	SAQ 4 Wks: Pain Limits Normal Work SF-12	SAQ Q24
ADCALM42	SAQ 4 Wks: Felt Calm/Peaceful SF-12	SAQ Q25
ADPEP42	SAQ 4 Wks: Had A Lot Of Energy SF-12	SAQ Q26
ADBLUE42	SAQ 4 Wks: Felt Downhearted/Blue SF-12	SAQ Q27
ADSOCA42	SAQ 4 Wks: Hlth Stopped Soc Activ SF-12	SAQ Q28
ADMOBI42	SAQ Health Today: Mobility EQ-5D	SAQ Q29
ADSELF42	SAQ Health Today: Self-Care EQ-5D	SAQ Q30
ADACTI42	SAQ Health Today: Usual Activity EQ-5D	SAQ Q31
ADPAYN42	SAQ Health Today: Pain/Discomfort EQ-5D	SAQ Q32
ADDEPR42	SAQ Hlth Today: Anxiety/Depression EQ-5D	SAQ Q33
ADSCAL42	SAQ Scale: Health State Today EQ-5D	SAQ Q34
EQU42	SAQ Preference Based Index EQ-5D	SAQ Q29 – Q33
ADINSA42	SAQ: Do Not Need Health Insurance	SAQ Q35
ADINSB42	SAQ: Health Insurance Not Worth Cost	SAQ Q36
ADRISK42	SAQ: More Likely To Take Risks	SAQ Q37
ADOVER42	SAQ: Can Overcome Ills Without Med Help	SAQ Q38
DSDIA53	DCS: Diabetes Diagnosis By Health Prof	DCS Q1
DSA1C53	DCS: Times Tested For A-One-C – 2001	DCS Q2
DSCKFT53	DCS: Times Feet Checked For Sores – 2001	DCS Q3
DSEYE53	DCS: Last Eye Exam With Pupils Dilated	DCS Q4
DSKIDN53	DCS: Has Diabetes Caused Kidney Problems	DCS Q5
DSEYPR53	DCS: Has Diabetes Caused Eye Probs	DCS Q6
DSDIET53	DCS: Treat Diabetes W/Diet Modification	DCS Q7
DSMED53	DCS: Treat Diabetes W/Meds By Mouth	DCS Q8
DSINSU53	DCS: Treat Diabetes W/Insulin Injections	DCS Q9
DSPRX53	DCS: Was Respondent A Proxy	Constructed

### WEIGHTS VARIABLES

VARIABLE	DESCRIPTION	SOURCE
PERWT01F	Expenditure File Person Weight, 2001	Constructed
FAMWT01F	Expenditure File Family Weight, 2001	Constructed
FAMWT01C	Expenditure File Family Weight-CPS Family on 12/31/01	Constructed
SAQWT01F	Expenditure File SAQ Weight, 2001	Constructed
DIABW01F	Expenditure File Diabetes Care Supplement Weight, 2001	Constructed
VARSTR01	Variance Estimation Stratum-2001	Constructed
VARPSU01	Variance Estimation PSU-2001	Constructed

## Appendix 1: Summary of Utilization and Expenditure Variables by Health Service Category

HEALTH SERVICE CATEGORY	UTILIZATION VARIABLE(S)	EXPENDITURE VARIABLE(S) <sup>1</sup>
<i>All Health Services</i>	--	TOT***01
<b>Office Based Visits</b>		
<b>Total Office Based Visits (Physician + Non-physician + Unknown)</b>	OBTOTV01	OBV***01
Office Based Visits to Physicians	OBDRV01	OBD***01
Office Based Visits to Non-Physicians	OBOTHV01	OBO***01
Office Based Visits to Chiropractors	OBCHIR01	OBC***01
Office Based Nurse or Nurse Practitioner Visits	OBNURS01	OBV***01
Office Based Visits to Optometrists	OBOPTO01	OBE***01
Office Based Physician Assistant Visits	OBASST01	OBA***01
Office Based Physical or Occupational Therapist Visits	OBTHER01	OBT***01
<b>Hospital Outpatient Visits</b>		
<b>Total Outpatient Visits (Physician + Non-physician + Unknown)</b>	OPTOTV01	--
Facility Expense	--	OPF***01
SBD Expense	--	OPD***01
<b>Outpatient Visits to Physicians</b>		
Facility Expense	--	OPV***01
SBD Expense	--	OPS***01
<b>Outpatient Visits to Non-Physicians</b>		
Facility Expense	--	OPO***01
SBD Expense	--	OPP***01

<sup>1</sup> See key at end of table for specific categories for \*\*\*.

HEALTH SERVICE CATEGORY	UTILIZATION VARIABLE(S)	EXPENDITURE VARIABLE(S)
<b>Emergency Room Visits</b>		
Total Emergency Room Visits	ERTOT01	--
Facility Expense	--	ERF***01
SBD Expense	--	ERD***01
<b>Inpatient Hospital Stays (Including Zero Night Stays)</b>		
<b>Total Inpatient Stays (Including Zero Night Stays)</b>	IPDIS01, IPNGTD01	--
Facility Expense	--	IPF***01
SBD Expense	--	IPD***01
<b>Zero night Hospital Stays</b>		
Facility Expense	--	ZIF***01
SBD Expense	--	ZID***01
<b>Dental Visits</b>		
<b>Total Dental Visits</b>	DVTOT01	DVT***01
General Dental Visits	DVGEN01	DVG***01
Orthodontist Visits	DVORTH01	DVO***01
<b>Home Health Care</b>		
<b>Total Home Health Care</b>	HHTOTD01	--
Agency Sponsored	HHAGD01	HHA***01
Paid Independent Providers	HHINDD01	HHN***01
Informal	HHINFD01	--
<b>Other</b>		
Vision Aids	--	VIS***01
Other Medical Supplies and Equipment	--	OTH***01
Prescription Medicines <sup>2</sup>	RXTOT01	RX***01

KEY: To complete variable name, replace \*\*\* with a particular source of payment category as identified in the following table:

<b>Source of Payment Category</b>	<b>***</b>
Total payments (sum of all sources)	EXP
Out of Pocket	SLF
Medicare	MCR
Medicaid	MCD
Private Insurance	PRV
Veteran's Administration	VA
Tricare	TRI
Other Federal Sources	OFD
Other State and Local Sources	STL
Workers' Compensation	WCP
Other Private	OPR
Other Public	OPU
Other Unclassified Sources	OSR
Total charges <sup>2</sup>	TCH

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<sup>2</sup> No charge variables on file for prescription medicines.